



SEQUENCE LISTING

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<160> 165

<170> FastSEQ for Windows Version 4.0

<210> 1

<211> 742

<212> PRT

<213> Homo sapiens

<400> 1

Met Asp Lys Phe Trp Trp His Ala Ala Trp Gly Leu Cys Leu Val Pro
1 5 10 15

Leu Ser Leu Ala Gln Ile Asp Leu Asn Ile Thr Cys Arg Phe Ala Gly
20 25 30

Val Phe His Val Glu Lys Asn Gly Arg Tyr Ser Ile Ser Arg Thr Glu
35 40 45

Ala Ala Asp Leu Cys Lys Ala Phe Asn Ser Thr Leu Pro Thr Met Ala
50 55 60

Gln Met Glu Lys Ala Leu Ser Ile Gly Phe Glu Thr Cys Arg Tyr Gly
65 70 75 80

Phe Ile Glu Gly His Val Val Ile Pro Arg Ile His Pro Asn Ser Ile
85 90 95

Cys Ala Ala Asn Asn Thr Gly Val Tyr Ile Leu Thr Ser Asn Thr Ser
100 105 110

Gln Tyr Asp Thr Tyr Cys Phe Asn Ala Ser Ala Pro Pro Glu Glu Asp
115 120 125

Cys Thr Ser Val Thr Asp Leu Pro Asn Ala Phe Asp Gly Pro Ile Thr
130 135 140

Ile Thr Ile Val Asn Arg Asp Gly Thr Arg Tyr Val Gln Lys Gly Glu
145 150 155 160

Tyr Arg Thr Asn Pro Glu Asp Ile Tyr Pro Ser Asn Pro Thr Asp Asp
165 170 175

Asp Val Ser Ser Gly Ser Ser Ser Glu Arg Ser Ser Thr Ser Gly Gly
180 185 190

Tyr Ile Phe Tyr Thr Phe Ser Thr Val His Pro Ile Pro Asp Glu Asp

195	200	205	
Ser Pro Trp Ile Thr Asp Ser	Thr Asp Arg Ile Pro Ala Thr Thr Leu		
210	215	220	
Met Ser Thr Ser Ala Thr Ala Thr Glu Thr Ala Thr Lys Arg Gln Glu			
225	230	235	240
Thr Trp Asp Trp Phe Ser Trp Leu Phe Leu Pro Ser Glu Ser Lys Asn			
245	250	255	
His Leu His Thr Thr Gln Met Ala Gly Thr Ser Ser Asn Thr Ile			
260	265	270	
Ser Ala Gly Trp Glu Pro Asn Glu Glu Asn Glu Asp Glu Arg Asp Arg			
275	280	285	
His Leu Ser Phe Ser Gly Ser Gly Ile Asp Asp Asp Glu Asp Phe Ile			
290	295	300	
Ser Ser Thr Ile Ser Thr Pro Arg Ala Phe Asp His Thr Lys Gln			
305	310	315	320
Asn Gln Asp Trp Thr Gln Trp Asn Pro Ser His Ser Asn Pro Glu Val			
325	330	335	
Leu Leu Gln Thr Thr Arg Met Thr Asp Val Asp Arg Asn Gly Thr			
340	345	350	
Thr Ala Tyr Glu Gly Asn Trp Asn Pro Glu Ala His Pro Pro Leu Ile			
355	360	365	
His His Glu His His Glu Glu Glu Glu Thr Pro His Ser Thr Ser Thr			
370	375	380	
Ile Gln Ala Thr Pro Ser Ser Thr Thr Glu Glu Thr Ala Thr Gln Lys			
385	390	395	400
Glu Gln Trp Phe Gly Asn Arg Trp His Glu Gly Tyr Arg Gln Thr Pro			
405	410	415	
Arg Glu Asp Ser His Ser Thr Thr Gly Thr Ala Ala Ala Ser Ala His			
420	425	430	
Thr Ser His Pro Met Gln Gly Arg Thr Thr Pro Ser Pro Glu Asp Ser			
435	440	445	
Ser Trp Thr Asp Phe Phe Asn Pro Ile Ser His Pro Met Gly Arg Gly			
450	455	460	
His Gln Ala Gly Arg Arg Met Asp Met Asp Ser Ser His Ser Thr Thr			
465	470	475	480
Leu Gln Pro Thr Ala Asn Pro Asn Thr Gly Leu Val Glu Asp Leu Asp			
485	490	495	
Arg Thr Gly Pro Leu Ser Met Thr Thr Gln Gln Ser Asn Ser Gln Ser			
500	505	510	
Phe Ser Thr Ser His Glu Gly Leu Glu Glu Asp Lys Asp His Pro Thr			
515	520	525	
Thr Ser Thr Leu Thr Ser Ser Asn Arg Asn Asp Val Thr Gly Gly Arg			
530	535	540	
Arg Asp Pro Asn His Ser Glu Gly Ser Thr Thr Leu Leu Glu Gly Tyr			
545	550	555	560
Thr Ser His Tyr Pro His Thr Lys Glu Ser Arg Thr Phe Ile Pro Val			
565	570	575	
Thr Ser Ala Lys Thr Gly Ser Phe Gly Val Thr Ala Val Thr Val Gly			
580	585	590	
Asp Ser Asn Ser Asn Val Asn Arg Ser Leu Ser Gly Asp Gln Asp Thr			
595	600	605	
Phe His Pro Ser Gly Gly Ser His Thr Thr His Gly Ser Glu Ser Asp			
610	615	620	
Gly His Ser His Gly Ser Gln Glu Gly Gly Ala Asn Thr Thr Ser Gly			
625	630	635	640
Pro Ile Arg Thr Pro Gln Ile Pro Glu Trp Leu Ile Ile Leu Ala Ser			
645	650	655	

Leu Leu Ala Leu Ala Leu Ile Leu Ala Val Cys Ile Ala Val Asn Ser
 660 665 670
 Arg Arg Arg Cys Gly Gln Lys Lys Lys Leu Val Ile Asn Ser Gly Asn
 675 680 685
 Gly Ala Val Glu Asp Arg Lys Pro Ser Gly Leu Asn Gly Glu Ala Ser
 690 695 700
 Lys Ser Gln Glu Met Val His Leu Val Asn Lys Glu Ser Ser Glu Thr
 705 710 715 720
 Pro Asp Gln Phe Met Thr Ala Asp Glu Thr Arg Asn Leu Gln Asn Val
 725 730 735
 Asp Met Lys Ile Gly Val
 740

<210> 2
 <211> 493
 <212> PRT
 <213> Homo sapiens

<400> 2
 Met Asp Lys Phe Trp Trp His Ala Ala Trp Gly Leu Cys Leu Val Pro
 1 5 10 15
 Leu Ser Leu Ala Gln Ile Asp Leu Asn Ile Thr Cys Arg Phe Ala Gly
 20 25 30
 Val Phe His Val Glu Lys Asn Gly Arg Tyr Ser Ile Ser Arg Thr Glu
 35 40 45
 Ala Ala Asp Leu Cys Lys Ala Phe Asn Ser Thr Leu Pro Thr Met Ala
 50 55 60
 Gln Met Glu Lys Ala Leu Ser Ile Gly Phe Glu Thr Cys Arg Tyr Gly
 65 70 75 80
 Phe Ile Glu Gly His Val Val Ile Pro Arg Ile His Pro Asn Ser Ile
 85 90 95
 Cys Ala Ala Asn Asn Thr Gly Val Tyr Ile Leu Thr Ser Asn Thr Ser
 100 105 110
 Gln Tyr Asp Thr Tyr Cys Phe Asn Ala Ser Ala Pro Pro Glu Glu Asp
 115 120 125
 Cys Thr Ser Val Thr Asp Leu Pro Asn Ala Phe Asp Gly Pro Ile Thr
 130 135 140
 Ile Thr Ile Val Asn Arg Asp Gly Thr Arg Tyr Val Gln Lys Gly Glu
 145 150 155 160
 Tyr Arg Thr Asn Pro Glu Asp Ile Tyr Pro Ser Asn Pro Thr Asp Asp
 165 170 175
 Asp Val Ser Ser Gly Ser Ser Glu Arg Ser Ser Thr Ser Gly Gly
 180 185 190
 Tyr Ile Phe Tyr Thr Phe Ser Thr Val His Pro Ile Pro Asp Glu Asp
 195 200 205
 Ser Pro Trp Ile Thr Asp Ser Thr Asp Arg Ile Pro Ala Thr Asn Met
 210 215 220
 Asp Ser Ser His Ser Thr Thr Leu Gln Pro Thr Ala Asn Pro Asn Thr
 225 230 235 240
 Gly Leu Val Glu Asp Leu Asp Arg Thr Gly Pro Leu Ser Met Thr Thr
 245 250 255
 Gln Gln Ser Asn Ser Gln Ser Phe Ser Thr Ser His Glu Gly Leu Glu
 260 265 270
 Glu Asp Lys Asp His Pro Thr Thr Ser Thr Leu Thr Ser Ser Asn Arg
 275 280 285
 Asn Asp Val Thr Gly Gly Arg Arg Asp Pro Asn His Ser Glu Gly Ser
 290 295 300

Thr Thr Leu Leu Glu Gly Tyr Thr Ser His Tyr Pro His Thr Lys Glu
 305 310 315 320
 Ser Arg Thr Phe Ile Pro Val Thr Ser Ala Lys Thr Gly Ser Phe Gly
 325 330 335
 Val Thr Ala Val Thr Val Gly Asp Ser Asn Ser Asn Val Asn Arg Ser
 340 345 350
 Leu Ser Gly Asp Gln Asp Thr Phe His Pro Ser Gly Gly Ser His Thr
 355 360 365
 Thr His Gly Ser Glu Ser Asp Gly His Ser His Gly Ser Gln Glu Gly
 370 375 380
 Gly Ala Asn Thr Thr Ser Gly Pro Ile Arg Thr Pro Gln Ile Pro Glu
 385 390 395 400
 Trp Leu Ile Ile Leu Ala Ser Leu Leu Ala Leu Ala Leu Ile Leu Ala
 405 410 415
 Val Cys Ile Ala Val Asn Ser Arg Arg Cys Gly Gln Lys Lys Lys
 420 425 430
 Leu Val Ile Asn Ser Gly Asn Gly Ala Val Glu Asp Arg Lys Pro Ser
 435 440 445
 Gly Leu Asn Gly Glu Ala Ser Lys Ser Gln Glu Met Val His Leu Val
 450 455 460
 Asn Lys Glu Ser Ser Glu Thr Pro Asp Gln Phe Met Thr Ala Asp Glu
 465 470 475 480
 Thr Arg Asn Leu Gln Asn Val Asp Met Lys Ile Gly Val
 485 490

<210> 3
 <211> 361
 <212> PRT
 <213> Homo sapiens

<400> 3

Met Asp Lys Phe Trp Trp His Ala Ala Trp Gly Leu Cys Leu Val Pro
 1 5 10 15
 Leu Ser Leu Ala Gln Ile Asp Leu Asn Ile Thr Cys Arg Phe Ala Gly
 20 25 30
 Val Phe His Val Glu Lys Asn Gly Arg Tyr Ser Ile Ser Arg Thr Glu
 35 40 45
 Ala Ala Asp Leu Cys Lys Ala Phe Asn Ser Thr Leu Pro Thr Met Ala
 50 55 60
 Gln Met Glu Lys Ala Leu Ser Ile Gly Phe Glu Thr Cys Arg Tyr Gly
 65 70 75 80
 Phe Ile Glu Gly His Val Val Ile Pro Arg Ile His Pro Asn Ser Ile
 85 90 95
 Cys Ala Ala Asn Asn Thr Gly Val Tyr Ile Leu Thr Ser Asn Thr Ser
 100 105 110
 Gln Tyr Asp Thr Tyr Cys Phe Asn Ala Ser Ala Pro Pro Glu Glu Asp
 115 120 125
 Cys Thr Ser Val Thr Asp Leu Pro Asn Ala Phe Asp Gly Pro Ile Thr
 130 135 140
 Ile Thr Ile Val Asn Arg Asp Gly Thr Arg Tyr Val Gln Lys Gly Glu
 145 150 155 160
 Tyr Arg Thr Asn Pro Glu Asp Ile Tyr Pro Ser Asn Pro Thr Asp Asp
 165 170 175
 Asp Val Ser Ser Gly Ser Ser Glu Arg Ser Ser Thr Ser Gly Gly
 180 185 190
 Tyr Ile Phe Tyr Thr Phe Ser Thr Val His Pro Ile Pro Asp Glu Asp
 195 200 205

Ser Pro Trp Ile Thr Asp Ser Thr Asp Arg Ile Pro Ala Thr Arg Asp
 210 215 220
 Gln Asp Thr Phe His Pro Ser Gly Gly Ser His Thr Thr His Gly Ser
 225 230 235 240
 Glu Ser Asp Gly His Ser His Gly Ser Gln Glu Gly Gly Ala Asn Thr
 245 250 255
 Thr Ser Gly Pro Ile Arg Thr Pro Gln Ile Pro Glu Trp Leu Ile Ile
 260 265 270
 Leu Ala Ser Leu Leu Ala Leu Ala Leu Ile Leu Ala Val Cys Ile Ala
 275 280 285
 Val Asn Ser Arg Arg Arg Cys Gly Gln Lys Lys Lys Leu Val Ile Asn
 290 295 300
 Ser Gly Asn Gly Ala Val Glu Asp Arg Lys Pro Ile Gly Leu Asn Gly
 305 310 315 320
 Glu Ala Ser Lys Ser Gln Glu Met Val His Leu Val Asn Lys Glu Ser
 325 330 335
 Ser Glu Thr Pro Asp Gln Phe Met Thr Ala Asp Glu Thr Arg Asn Leu
 340 345 350
 Gln Asn Val Asp Met Lys Ile Gly Val
 355 360

<210> 4
 <211> 336
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetically generated oligonucleotide

<400> 4
 gacatccaga tgaccaggc tccactctcc ctggccgtca cccttggaca gccggcctcc 60
 attcctcgca ggtctagtga aagcctcggt tacagtgtat gaaacaccta cttgggttgg 120
 tttcagcaga ggccaggcca atctccacgg cgcctacttt ataagggttc taaccggac 180
 tctgggttcc cagacagatt cagcggcagt gggtcaggca ctgatttcac actgcacatc 240
 agcagggttgg aggctgaaga ttttgggtt tattactgca tgcattctat acgctggccg 300
 tggacgttgc gccaaggac cacggtgaa atcaag 336

<210> 5
 <211> 112
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetically generated peptide

<400> 5
 Asp Ile Gln Met Thr Gln Ser Pro Leu Ser Leu Ala Val Thr Leu Gly
 1 5 10 15
 Gln Pro Ala Ser Ile Ser Cys Arg Ser Ser Glu Ser Leu Val Tyr Ser
 20 25 30
 Asp Gly Asn Thr Tyr Leu Gly Trp Phe Gln Gln Arg Pro Gly Gln Ser
 35 40 45
 Pro Arg Arg Leu Leu Tyr Lys Val Ser Asn Arg Asp Ser Gly Val Pro
 50 55 60
 Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu His Ile
 65 70 75 80
 Ser Arg Val Glu Ala Glu Asp Val Gly Val Tyr Tyr Cys Met His Ser

85	90	95
Ile Arg Trp Pro Trp Thr Phe Gly Gln Gly Thr Thr Val Glu Ile Lys		
100	105	110

<210> 6
 <211> 357
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetically generated oligonucleotide

<400> 6

gaagttcaat	tgttagagtc	tggtggcggt	cttggtcagc	ctgggtggttc	tttacgtctt	60
tcttcgcgtg	cttccggatt	cactttctct	ccttacacta	tggcttgggt	tcgcacaagct	120
cctggtaaag	gtttggagtg	ggtttcttct	atctatcctt	ctggtggcac	tactccttat	180
gctgactccg	ttaaaggtcg	cttcactatac	tctagagaca	actctaagaa	tactctctac	240
ttgcagatga	acagcttaag	ggctgaggac	actgcagtct	actattgtgc	gagacatttt	300
actgtgtatg	atggtttga	tttggggc	cgaggacaa	tggtcaccgt	ctcaagc	357

<210> 7
 <211> 119
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetically generated peptide

<400> 7

Glu	Val	Gln	Leu	Leu	Glu	Ser	Gly	Gly	Gly	Leu	Val	Gln	Pro	Gly	Gly
1					5			10				15			
Ser	Leu	Arg	Leu	Ser	Cys	Ala	Ala	Ser	Gly	Phe	Thr	Phe	Ser	Pro	Tyr
					20			25				30			
Thr	Met	Ala	Trp	Val	Arg	Gln	Ala	Pro	Gly	Lys	Gly	Leu	Glu	Trp	Val
					35			40			45				
Ser	Ser	Ile	Tyr	Pro	Ser	Gly	Gly	Thr	Thr	Pro	Tyr	Ala	Asp	Ser	Val
					50			55			60				
Lys	Gly	Arg	Phe	Thr	Ile	Ser	Arg	Asp	Asn	Ser	Lys	Asn	Thr	Leu	Tyr
65					70			75			80				
Leu	Gln	Met	Asn	Ser	Leu	Arg	Ala	Glu	Asp	Thr	Ala	Val	Tyr	Tyr	Cys
					85			90			95				
Ala	Arg	His	Phe	Thr	Val	Tyr	Asp	Gly	Phe	Asp	Leu	Trp	Gly	Arg	Gly
					100			105			110				
Thr	Met	Val	Thr	Val	Ser	Ser									
					115										

<210> 8
 <211> 324
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetically generated oligonucleotide

<400> 8

gacatccaga	tgaccaggc	tccaggcacc	ctgtcttgc	ctccagggg	aagagccacc	60
ctctcctgca	gggcaggatca	gagtgttagc	agcagctact	tagcctggta	ccagcagaaa	120

cctggccagg ctcccaggct cctcatctat ggtgcaccca gcagggccac tggcatccca	180
gacaggttca gtggcagtgg gctctggaca gacttcactc tcaccatca g cagactggag	240
cctgaagatt ttgcagtgt a ttactgtcag c agtatggta gctcacctcg aacgttcggc	300
caagggacca aggtggaaat caaa	324

<210> 9
 <211> 108
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetically generated peptide

<400> 9
 Asp Ile Gln Met Thr Gln Ser Pro Gly Thr Leu Ser Leu Ser Pro Gly
 1 5 10 15
 Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Ser Ser Ser
 20 25 30
 Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu
 35 40 45
 Ile Tyr Gly Ala Ser Ser Arg Ala Thr Gly Ile Pro Asp Arg Phe Ser
 50 55 60
 Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu
 65 70 75 80
 Pro Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Gly Ser Ser Pro
 85 90 95
 Arg Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
 100 105

<210> 10
 <211> 360
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetically generated oligonucleotide

<400> 10
 gaagttcaat tggtagagtc tggcggcggt cttgttcagc ctgggtggttc tttacgtctt 60
 tcttgcgcgtg cttccggatt cactttctct cattacggta tggcttgggt tcgccaagct 120
 cctggtaaaag gtttggatgt gtttcttgg atcggcctt ctgggtggcgc tactctttat 180
 gctgactccg tttaaggtcg cttcaactatc tctagagaca actctaagaa tactctctac 240
 ttgcagatga acagctaag ggctgaggac actgcagtct actattgtgc gaaaggaagg 300
 tggaaataggg gtggcgccctt tgacaactgg ggccaggaa ccctggtcac cgtctcaagc 360

<210> 11
 <211> 120
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetically generated peptide

<400> 11
 Glu Val Gln Leu Leu Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
 1 5 10 15
 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser His Tyr

20	25	30	
Gly Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val			
35	40	45	
Ser Trp Ile Gly Pro Ser Gly Gly Ala Thr Leu Tyr Ala Asp Ser Val			
50	55	60	
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr			
65	70	75	80
Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys			
85	90	95	
Ala Lys Gly Arg Trp Asn Arg Gly Gly Ala Phe Asp Asn Trp Gly Gln			
100	105	110	
Gly Thr Leu Val Thr Val Ser Ser			
115	120		

<210> 12
<211> 333
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetically generated oligonucleotide

<400> 12				
gacatccaga tgaccaggc tccactctcc ctgcccgtca cccctggagg gccggcctcc				60
atccctgca ggtctagtca gagcctcctg catagtaatg gataacaacta tttgattgg				120
tacctgcaga agccaggcga gtcctccacag ctcctgatct atttgggttc taatcgggcc				180
tccggggtcc ctgacagggtt cagtggcagt ggatcaggca cagattttac actgaaaatc				240
agcagagtgg aggctgagga tttgggggtt tattactgca tgcaagctct gcaaccgtac				300
actttggcc aggggaccaa gctggagatc aaa				333

<210> 13
<211> 111
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetically generated peptide

<400> 13				
Asp Ile Gln Met Thr Gln Ser Pro Leu Ser Leu Pro Val Thr Pro Gly				
1 5 10 15				
Gly Pro Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Leu Leu His Ser				
20 25 30				
Asn Gly Tyr Asn Tyr Leu Asp Trp Tyr Leu Gln Lys Pro Gly Gln Ser				
35 40 45				
Pro Gln Leu Leu Ile Tyr Leu Gly Ser Asn Arg Ala Ser Gly Val Pro				
50 55 60				
Asp Arg Phe Ser Gly Ser Gly Thr Asp Phe Thr Leu Lys Ile				
65 70 75 80				
Ser Arg Val Glu Ala Glu Asp Val Gly Val Tyr Tyr Cys Met Gln Ala				
85 90 95				
Leu Gln Pro Tyr Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys				
100 105 110				

<210> 14
<211> 369
<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetically generated oligonucleotide

<400> 14

gaagttcaat	tgtagagtc	tggggcggt	cttggtcagc	ctgggggttc	tttacgtctt	60
tcttcgcgtg	cttccggatt	cactttctct	ccttaccta	tgtctgggt	tcgccaagct	120
cctggtaaaag	gttggagtg	ggttcttct	atctattctt	ctggggcct	tactgattat	180
gctgactccg	ttaaaggctcg	cttcactatac	tctagagaca	actctaagaa	tactctctac	240
ttgcagatga	acagcttaag	ggctgaggac	actgcagtct	accattgtgc	gagagacggt	300
tactatgata	gtagtggta	cgagggttt	gactactggg	gccaggaaac	cctggtcacc	360
gtctcaagc						369

<210> 15

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetically generated peptide

<400> 15

Glu	Val	Gln	Leu	Leu	Glu	Ser	Gly	Gly	Gly	Leu	Val	Gln	Pro	Gly	Gly
1															15
Ser	Leu	Arg	Leu	Ser	Cys	Ala	Ala	Ser	Gly	Phe	Thr	Phe	Ser	Pro	Tyr
															30
Leu	Met	Ser	Trp	Val	Arg	Gln	Ala	Pro	Gly	Lys	Gly	Leu	Glu	Trp	Val
															45
Ser	Ser	Ile	Tyr	Ser	Ser	Gly	Gly	Leu	Thr	Asp	Tyr	Ala	Asp	Ser	Val
															60
Lys	Gly	Arg	Phe	Thr	Ile	Ser	Arg	Asp	Asn	Ser	Lys	Asn	Thr	Leu	Tyr
															80
Leu	Gln	Met	Asn	Ser	Leu	Arg	Ala	Glu	Asp	Thr	Ala	Val	His	Tyr	Cys
															95
Ala	Arg	Asp	Gly	Tyr	Tyr	Asp	Ser	Ser	Gly	Tyr	Glu	Gly	Phe	Asp	Tyr
															110
Trp	Gly	Gln	Gly	Thr	Leu	Val	Thr	Val	Ser	Ser					
															120

<210> 16

<211> 16

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetically generated peptide

<400> 16

Arg	Ser	Ser	Glu	Ser	Leu	Val	Tyr	Ser	Asp	Gly	Asn	Thr	Tyr	Leu	Gly
1															15

<210> 17

<211> 7

<212> PRT

<213> Artificial Sequence

<220>
<223> Synthetically generated peptide

<400> 17
Lys Val Ser Asn Arg Asp Ser
1 5

<210> 18
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetically generated peptide

<400> 18
Met His Ser Ile Arg Trp Pro Trp Thr
1 5

<210> 19
<211> 23
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetically generated peptide

<400> 19
Asp Ile Gln Met Thr Gln Ser Pro Leu Ser Leu Ala Val Thr Leu Gly
1 5 10 15
Gln Pro Ala Ser Ile Ser Cys
20

<210> 20
<211> 15
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetically generated peptide

<400> 20
Trp Phe Gln Gln Arg Pro Gly Gln Ser Pro Arg Arg Leu Leu Tyr
1 5 10 15

<210> 21
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetically generated peptide

<400> 21
Gly Val Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr
1 5 10 15
Leu His Ile Ser Arg Val Glu Ala Glu Asp Val Gly Val Tyr Tyr Cys

20

25

30

<210> 22
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetically generated peptide

<400> 22
Phe Gly Gln Gly Thr Thr Val Glu Ile Lys
1 5 10

<210> 23
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetically generated peptide

<400> 23
Pro Tyr Thr Met Ala
1 5

<210> 24
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetically generated peptide

<400> 24
Ser Ile Tyr Pro Ser Gly Gly Thr Thr Pro Tyr Ala Asp Ser Val Lys
1 5 10 15
Gly

<210> 25
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetically generated peptide

<400> 25
His Phe Thr Val Tyr Asp Gly Phe Asp
1 5

<210> 26
<211> 30
<212> PRT
<213> Artificial Sequence

<220>

<223> Synthetically generated peptide

<400> 26

Glu	Val	Gln	Leu	Leu	Glu	Ser	Gly	Gly	Gly	Leu	Val	Gln	Pro	Gly	Gly
1					5					10					15
Ser	Leu	Arg	Leu	Ser	Cys	Ala	Ala	Ser	Gly	Phe	Thr	Phe	Ser		
						20			25						30

<210> 27

<211> 14

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetically generated peptide

<400> 27

Trp	Val	Arg	Gln	Ala	Pro	Gly	Lys	Gly	Leu	Glu	Trp	Val	Ser		
1					5				10						

<210> 28

<211> 32

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetically generated peptide

<400> 28

Arg	Phe	Thr	Ile	Ser	Arg	Asp	Asn	Ser	Lys	Asn	Thr	Leu	Tyr	Leu	Gln
1					5				10						15

Met	Asn	Ser	Leu	Arg	Ala	Glu	Asp	Thr	Ala	Val	Tyr	Tyr	Cys	Ala	Arg
							20			25					30

<210> 29

<211> 12

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetically generated peptide

<400> 29

Leu	Trp	Gly	Arg	Gly	Thr	Met	Val	Thr	Val	Ser	Ser				
1					5				10						

<210> 30

<211> 12

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetically generated peptide

<400> 30

Arg Ala Ser Gln Ser Val Ser Ser Tyr Leu Ala

1 5 10

<210> 31
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetically generated peptide

<400> 31
Gly Ala Ser Ser Arg Ala Thr
1 5

<210> 32
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetically generated peptide

<400> 32
Gln Gln Tyr Gly Ser Ser Pro Arg Thr
1 5

<210> 33
<211> 23
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetically generated peptide

<400> 33
Asp Ile Gln Met Thr Gln Ser Pro Gly Thr Leu Ser Leu Ser Pro Gly
1 5 10 15
Glu Arg Ala Thr Leu Ser Cys
20

<210> 34
<211> 15
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetically generated peptide

<400> 34
Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Ile Tyr
1 5 10 15

<210> 35
<211> 32
<212> PRT
<213> Artificial Sequence

<220>

<223> Synthetically generated peptide

<400> 35

Gly	Ile	Pro	Asp	Arg	Phe	Ser	Gly	Ser	Gly	Ser	Gly	Thr	Asp	Phe	Thr
1				5				10					15		
Leu	Thr	Ile	Ser	Arg	Leu	Glu	Pro	Glu	Asp	Phe	Ala	Val	Tyr	Tyr	Cys
		20				25							30		

<210> 36

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetically generated peptide

<400> 36

Phe	Gly	Gln	Gly	Thr	Lys	Val	Glu	Ile	Lys						
1				5				10							

<210> 37

<211> 5

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetically generated peptide

<400> 37

His	Tyr	Gly	Met	Ser											
1			5												

<210> 38

<211> 17

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetically generated peptide

<400> 38

Trp	Ile	Gly	Pro	Ser	Gly	Gly	Ala	Thr	Leu	Tyr	Ala	Asp	Ser	Val	Lys
1				5				10				15			
Gly															

<210> 39

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetically generated peptide

<400> 39

Gly Arg Trp Asn Arg Gly Gly Ala Phe Asp

1 5 10

<210> 40
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetically generated peptide

<400> 40
Glu Val Gln Leu Leu Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
1 5 10 15
Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser
20 25 30

<210> 41
<211> 14
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetically generated peptide

<400> 41
Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val Ser
1 5 10

<210> 42
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetically generated peptide

<400> 42
Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr Leu Gln
1 5 10 15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Lys
20 25 30

<210> 43
<211> 12
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetically generated peptide

<400> 43
Asn Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
1 5 10

<210> 44
<211> 16
<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetically generated peptide

<400> 44

Arg Ser Ser Gln Ser Leu Leu His Ser Asn Gly Tyr Asn Tyr Leu Asp
1 5 10 15

<210> 45

<211> 7

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetically generated peptide

<400> 45

Leu Gly Ser Asn Arg Ala Ser
1 5

<210> 46

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetically generated peptide

<400> 46

Met Gln Ala Leu Gln Pro Tyr Thr
1 5

<210> 47

<211> 23

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetically generated peptide

<400> 47

Asp Ile Gln Met Thr Gln Ser Pro Leu Ser Leu Pro Val Thr Pro Gly
1 5 10 15

Gly Pro Ala Ser Ile Ser Cys
20

<210> 48

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetically generated peptide

<400> 48

Trp Tyr Leu Gln Lys Pro Gly Gln Ser Pro Gln Leu Leu Ile Tyr

1 5 10 15

<210> 49
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetically generated peptide

<400> 49
Gly Val Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr
1 5 10 15
Leu Lys Ile Ser Arg Val Glu Ala Glu Asp Val Gly Val Tyr Tyr Cys
20 25 30

<210> 50
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetically generated peptide

<400> 50
Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys
1 5 10

<210> 51
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetically generated peptide

<400> 51
Pro Tyr Leu Met Ser
1 5

<210> 52
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetically generated peptide

<400> 52
Ser Ile Tyr Ser Ser Gly Gly Leu Thr Asp Tyr Ala Asp Ser Val Lys
1 5 10 15
Gly

<210> 53
<211> 13
<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetically generated peptide

<400> 53

Asp Gly Tyr Tyr Asp Ser Ser Gly Tyr Glu Gly Phe Asp
1 5 10

<210> 54

<211> 30

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetically generated peptide

<400> 54

Glu Val Gln Leu Leu Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
1 5 10 15
Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser
20 25 30

<210> 55

<211> 14

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetically generated peptide

<400> 55

Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val Ser
1 5 10

<210> 56

<211> 32

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetically generated peptide

<400> 56

Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr Leu Gln
1 5 10 15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr His Cys Ala Arg
20 25 30

<210> 57

<211> 12

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetically generated peptide

<400> 57
 Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
 1 5 10

<210> 58
 <211> 336
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetically generated oligonucleotide

<400> 58
 gacatccaga tgacctcgtc cttccactctcc ctgcccgtca cccctggaga gccggcctcc 60
 attcctcgca ggtcttagtca gagcctcctg catagttaatg gatacaacta tttggattgg 120
 tacctgcaga agccaggcgtca gttccacag cttctgtatct atttgggttc taatcgggccc 180
 tccgggttcc ctgacagggtt cagtggcagt ggatcaggca cagattttac actgaaaatc 240
 agcagagtgg aggctgagga tttgggttattactgca tgcaagctct acaaactcct 300
 cccactttcg gcggaggac caaggtggag atcaaa 336

<210> 59
 <211> 112
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetically generated peptide

<400> 59
 Asp Ile Gln Met Thr Gln Ser Pro Leu Ser Leu Pro Val Thr Pro Gly
 1 5 10 15
 Glu Pro Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Leu Leu His Ser
 20 25 30
 Asn Gly Tyr Asn Tyr Leu Asp Trp Tyr Leu Gln Lys Pro Gly Gln Ser
 35 40 45
 Pro Gln Leu Leu Ile Tyr Leu Gly Ser Asn Arg Ala Ser Gly Val Pro
 50 55 60
 Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Lys Ile
 65 70 75 80
 Ser Arg Val Glu Ala Glu Asp Val Gly Val Tyr Tyr Cys Met Gln Ala
 85 90 95
 Leu Gln Thr Pro Pro Thr Phe Gly Gly Thr Lys Val Glu Ile Lys
 100 105 110

<210> 60
 <211> 348
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetically generated oligonucleotide

<400> 60
 gaagttcaat tgtagagtc tggggcggt cttgttcagc ctgggtggttc tttacgtctt 60
 tcttgcgtc cttccggatt cactttctct gagtacggta tgggtgggt tcggccaagct 120
 cctggtaaag gtttggatgt gtttcttctt atcggttctt ctgggtggctt tacttttat 180
 gctgactccg tttaaggctcg cttcactatc tctagagaca actctaagaa tactctctac 240

ttgcagatga acagcttaag ggctgaggac actgcagtct actattgtgc gagaggcact 300
 cgtacagtaa ccaactgggg ccagggagcc ctggtcaccg tctcaagc 348

<210> 61
 <211> 116
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetically generated peptide

<400> 61
 Glu Val Gln Leu Leu Glu Ser Gly Gly Leu Val Gln Pro Gly Gly
 1 5 10 15
 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Glu Tyr
 20 25 30
 Gly Met Gly Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45
 Ser Ser Ile Val Ser Ser Gly Gly Phe Thr Phe Tyr Ala Asp Ser Val
 50 55 60
 Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr
 65 70 75 80
 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 Ala Arg Gly Thr Arg Thr Val Thr Asn Trp Gly Gln Gly Ala Leu Val
 100 105 110
 Thr Val Ser Ser
 115

<210> 62
 <211> 336
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetically generated oligonucleotide

<400> 62
 gacatccaga tgaccaggc tccactctcc ctgcccgtca cccctggaga gccggcctcc 60
 atccctgca ggtctagtca gagcctcctg catagtaatg gataacaacta tttggattgg 120
 tacctgcaga agccaggggca gtctccacag ctcctgatct atttgggttc taatcgggccc 180
 tccgggggtcc ctgacagggtt cagtggcagt ggtcaggca cagatttac actgaaaatc 240
 agcagagtgg aggctgagga tttgggggtt tattactgca tgcaagctct acaaaccct 300
 tggacttttg gccaggggac caagctggag atcaaa 336

<210> 63
 <211> 112
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetically generated peptide

<400> 63
 Asp Ile Gln Met Thr Gln Ser Pro Leu Ser Leu Pro Val Thr Pro Gly
 1 5 10 15
 Glu Pro Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Leu Leu His Ser

20	25	30	
Asn Gly Tyr Asn Tyr Leu Asp Trp Tyr Leu Gln Lys Pro Gly Gln Ser			
35	40	45	
Pro Gln Leu Leu Ile Tyr Leu Gly Ser Asn Arg Ala Ser Gly Val Pro			
50	55	60	
Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Lys Ile			
65	70	75	80
Ser Arg Val Glu Ala Glu Asp Val Gly Val Tyr Tyr Cys Met Gln Ala			
85	90	95	
Leu Gln Thr Pro Trp Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys			
100	105	110	

<210> 64

<211> 354

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetically generated oligonucleotide

<400> 64

gaagttcaat	tgttagagtc	tggggcggt	cttggtcagc	ctgggtggttc	tttacgtctt	60
tcttcgcgtg	cttccggatt	cactttctct	ctttaccgta	tgcgttgggt	tcgccaagct	120
cctggtaaaag	gtttggagtg	ggtttcttct	atcttcctt	ctgggtggcat	tactgagttat	180
gctgactccg	ttaaaggtcg	cttcactatac	tctagagaca	actctaagaa	tactctctac	240
ttgcagatga	acagcttaag	ggctgaggac	actgcagtct	actattgtgc	gctagacgtg	300
gggggtgggag	ctgctgacta	ctggggccag	ggaaccctgg	tcaccgtctc	aagc	354

<210> 65

<211> 118

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetically generated peptide

<400> 65

Glu Val Gln Leu Leu Glu Ser Gly Gly	Gly Leu Val Gln Pro Gly Gly		
1	5	10	15
Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Leu Tyr			
20	25	30	
Arg Met Arg Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val			
35	40	45	
Ser Ser Ile Ser Pro Ser Gly Gly Ile Thr Glu Tyr Ala Asp Ser Val			
50	55	60	
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr			
65	70	75	80
Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys			
85	90	95	
Ala Leu Asp Val Gly Val Gly Ala Ala Asp Tyr Trp Gly Gln Gly Thr			
100	105	110	
Leu Val Thr Val Ser Ser			
115			

<210> 66

<211> 336

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetically generated oligonucleotide

<400> 66

gacatccaga	tgaccaggc	tccactctcc	ctgcccgtca	cccctggaga	gccggcctcc	60
atccctgca	ggtctagtca	gaggcctcctg	catatgtatg	gatacaacta	tttggattgg	120
tacctgcaga	agccaggggca	gtctccacag	ctcctgatct	atttgggttc	taatcgggccc	180
tccgggttcc	ctgacagggtt	cagtggcagt	ggatcaggca	cagatttac	actgaaaatc	240
agcggagtggtt	aggctgagga	tgttgggtt	tattactgca	tgcaagctct	acaaactggg	300
tacacttttgc	gccaggggac	caagctggag	atcaaa			336

<210> 67

<211> 112

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetically generated peptide

<400> 67

Asp	Ile	Gln	Met	Thr	Gln	Ser	Pro	Leu	Ser	Leu	Pro	Val	Thr	Pro	Gly
1															
Glu	Pro	Ala	Ser	Ile	Ser	Cys	Arg	Ser	Ser	Gln	Ser	Leu	Leu	His	Ser
Asn	Gly	Tyr	Asn	Tyr	Leu	Asp	Trp	Tyr	Leu	Gln	Lys	Pro	Gly	Gln	Ser
35															
Pro	Gln	Leu	Leu	Ile	Tyr	Leu	Gly	Ser	Asn	Arg	Ala	Ser	Gly	Val	Pro
50															
Asp	Arg	Phe	Ser	Gly	Ser	Gly	Ser	Gly	Thr	Asp	Phe	Thr	Leu	Lys	Ile
65															
Ser	Gly	Val	Glu	Ala	Glu	Asp	Val	Gly	Val	Tyr	Tyr	Cys	Met	Gln	Ala
85															
Leu	Gln	Thr	Gly	Tyr	Thr	Phe	Gly	Gln	Gly	Thr	Lys	Leu	Glu	Ile	Lys
100															
105															
110															

<210> 68

<211> 354

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetically generated oligonucleotide

<400> 68

gaagttaat	tgttagagtc	tggtggcggt	cttggtcagc	ctgggtggttc	tttacgtctt	60
tcttcgcgtg	cttccggatt	cactttctct	aagtacacta	tgtgggtgggt	tcgcacatct	120
cctggtaaaag	gtttggagtg	ggtttcttct	atctggtctt	ctgggtggctt	tactcggtat	180
gctgactccg	ttaaaggctcg	cttcactatc	tcttagagaca	actctaagaa	tactctctac	240
ttgcagatgtt	acagcttaag	ggctgaggac	actgcagtct	actattgtgc	gggacgtatgt	300
gggagctacc	ccgctgatat	ctggggccaa	gggacaatgg	tcaccgtctc	aagc	354

<210> 69

<211> 118

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetically generated peptide

<400> 69

<210> 70

<211> 336

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetically generated oligonucleotide

<400> 70

gacatccaga	tgaccccagtc	tccactctcc	ctgcccgtca	cccctggaga	gccggcctcc	60
atctcctgca	ggtcttagtca	gagcctcctg	catactaattg	gatacaacta	tttggatttg	120
tacctgcaga	agccaggggca	gtctccacag	ctcctgatct	atttgggttc	taatcggggc	180
tccggggtcc	ccgacaggtt	cagtggcagt	ggatcaggca	cagatttac	actgaaaatc	240
agcagagtg	aggctgagga	tgttgggtt	tattactgca	tgcaagctct	acaaaactcct	300
aggactttcg	gcggaggggac	caaggtggag	atcaaa			336

<210> 71

<211> 112

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetically generated peptide

<400> 71

Ser	Arg	Val	Glu	Ala	Glu	Asp	Val	Gly	Val	Tyr	Tyr	Cys	Met	Gln	Ala
			85					90						95	
Leu	Gln	Thr	Pro	Arg	Thr	Phe	Gly	Gly	Gly	Thr	Lys	Val	Glu	Ile	Lys
			100					105						110	

<210> 72

<211> 342

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetically generated oligonucleotide

<400> 72

gaagttcaat	tgttagagtc	tggtggcggt	cttggtcagc	ctgggtggttc	tttacgtctt	60
tcttcgcgtg	cttccggatt	cactttctct	cattactcta	tgtatgtgggt	tcgcacaagct	120
cctggtaaaag	gtttggagtg	ggtttcttct	atcttcctg	gtggctggac	tctttatgct	180
gactccgtta	aagggtcgctt	cactatctct	agagacaact	ctaagaatac	tctctacttg	240
cagatgaaca	gcttaagggc	tgaggacact	gcagctact	attgtgcgag	agatcgggca	300
gctgcctact	ggggccaggg	aaccctggtc	accgtctcaa	gc		342

<210> 73

<211> 114

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetically generated peptide

<400> 73

Glu	Val	Gln	Leu	Leu	Glu	Ser	Gly	Gly	Gly	Leu	Val	Gln	Pro	Gly	Gly
1					5			10					15		
Ser	Leu	Arg	Leu	Ser	Cys	Ala	Ala	Ser	Gly	Phe	Thr	Phe	Ser	His	Tyr
								20		25			30		
Ser	Met	Met	Trp	Val	Arg	Gln	Ala	Pro	Gly	Lys	Gly	Leu	Glu	Trp	Val
								35		40			45		
Ser	Ser	Ile	Phe	Pro	Gly	Gly	Trp	Thr	Leu	Tyr	Ala	Asp	Ser	Val	Lys
								50		55			60		
Gly	Arg	Phe	Thr	Ile	Ser	Arg	Asp	Asn	Ser	Lys	Asn	Thr	Leu	Tyr	Leu
								65		70			75		80
Gln	Met	Asn	Ser	Leu	Arg	Ala	Glu	Asp	Thr	Ala	Val	Tyr	Tyr	Cys	Ala
								85		90			95		
Arg	Asp	Arg	Ala	Ala	Tyr	Trp	Gly	Gln	Gly	Thr	Leu	Val	Thr	Val	
								100		105			110		
Ser	Ser														

<210> 74

<211> 336

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetically generated oligonucleotide

<400> 74

gacatccaga	tgacccagtc	tccactctcc	ctgcccgtca	cccctggaga	gccggcctcc	60
------------	------------	------------	------------	------------	------------	----

atctcctgca ggtctagtca gagcctcctg	catagtaatg	gataacaacta	tttggattgg	120
tacctgcaga agccagggca	gtctccacag	ctcctgatct	atttgggttc	180
tccggggtcc ctgacaggtt	cagtggcagt	ggatcaggca	cagattttac	240
agcagagtgg aggctgagga	tgttgggtt	tattactgca	tgcaagctct	300
tggacgttcg gccaaggac	caaggtggaa	atcaaa		336

<210> 75
 <211> 112
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetically generated peptide

<400> 75

Asp Ile Gln Met Thr Gln Ser Pro Leu Ser Leu Pro Val Thr Pro Gly				
1	5	10	15	
Glu Pro Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Leu Leu His Ser				
20	25	30		
Asn Gly Tyr Asn Tyr Leu Asp Trp Tyr Leu Gln Lys Pro Gly Gln Ser				
35	40	45		
Pro Gln Leu Leu Ile Tyr Leu Gly Ser Asn Arg Ala Ser Gly Val Pro				
50	55	60		
Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Lys Ile				
65	70	75	80	
Ser Arg Val Glu Ala Glu Asp Val Gly Val Tyr Tyr Cys Met Gln Ala				
85	90	95		
Leu Gln Thr Pro Trp Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys				
100	105	110		

<210> 76
 <211> 351
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetically generated oligonucleotide

<400> 76

gaagttcaat tgtagagtc tggggcggt	cttggtcagc	ctgggtggttc	tttacgtctt	60
tcttcgcctg cttccggatt	cactttctct	aattacacta	tgaattgggt	120
cctggtaaag gtttggagtg	ggtttcttct	atcgtttctt	ctgggtggctt	180
gctgactccg tttaaggctcg	cttcactatc	tctagagaca	actctaagaa	240
ttgcagatga acagcttaag	ggctgaggac	actgcagtct	actattgtgc	300
tctagtcagc ccgcacatctg	gggccaggaa	agcctggtca	ccgtctcaag c	351

<210> 77
 <211> 117
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetically generated peptide

<400> 77

Glu Val Gln Leu Leu Glu Ser Gly Gly	Gly	Gly	Leu Val Gln Pro Gly	Gly
1	5	10	15	

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Asn Tyr
 20 25 30
 Thr Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45
 Ser Ser Ile Val Ser Ser Gly Gly Phe Thr Lys Tyr Ala Asp Ser Val
 50 55 60
 Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr
 65 70 75 80
 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 Ala Arg Gly Trp Ser Ser Gln Pro Ala Ile Trp Gly Gln Gly Ser Leu
 100 105 110
 Val Thr Val Ser Ser
 115

<210> 78
 <211> 321
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetically generated oligonucleotide

<400> 78
 gacatccaga tgaccaggc tccatcctcc ctgtctgcat ctgttaggaga cagagtcacc
 atcaacttgcc gggcaagtca gagcattggc agctatttaa attggtatca gcagaaaacca
 gggaaagccc ctaagctcct gatctatgct gcatccagg tgcaaagtgg ggtcccatca
 aggttcagtg gcagtggatc tggacagat ttcactctca ccatcagcag tctgcaacct
 gaagattttg caacttacta ctgtcaacag agttactcta cccctcgac tttcgccct
 gggacccaaag tggatataaa a

<210> 79
 <211> 107
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetically generated peptide

<400> 79
 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
 1 5 10 15
 Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Ser Ile Gly Ser Tyr
 20 25 30
 Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
 35 40 45
 Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60
 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80
 Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Ser Tyr Ser Thr Pro Arg
 85 90 95
 Thr Phe Gly Pro Gly Thr Lys Val Asp Ile Lys
 100 105

<210> 80
 <211> 366

<212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetically generated oligonucleotide

<400> 80

gaagttcaat	tgttagagtc	tggtggcggt	cttggtcagc	ctgggtggttc	tttacgtctt	60
tcttcgcgtg	cttccggatt	cactttctct	tggtaactcta	tgtcttgggt	tcgcacaagct	120
cctggtaaaag	gtttggagtg	ggtttcttct	atcggtcctt	ctgggtggcca	gactcggtat	180
gctgactccg	ttaaaggtcg	cttcactatc	tctagagaca	actctaagaa	tactctctac	240
ttgcagatga	acagctaag	ggctgaggac	actgcagtct	actattgtgc	gagagattac	300
tatgatagt	gtggttattc	gtactttgac	tactggggcc	agggaaaccca	ggtcaccgtc	360
tcaagc						366

<210> 81

<211> 122

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetically generated peptide

<400> 81

Glu	Val	Gln	Leu	Leu	Glu	Ser	Gly	Gly	Gly	Leu	Val	Gln	Pro	Gly	Gly
1															
Ser	Leu	Arg	Leu	Ser	Cys	Ala	Ala	Ser	Gly	Phe	Thr	Phe	Ser	Trp	Tyr
Ser	Met	Ser	Trp	Val	Arg	Gln	Ala	Pro	Gly	Lys	Gly	Leu	Glu	Trp	Val
Ser	Ser	Ile	Gly	Pro	Ser	Gly	Gly	Gln	Thr	Arg	Tyr	Ala	Asp	Ser	Val
Lys	Gly	Arg	Phe	Thr	Ile	Ser	Arg	Asp	Asn	Ser	Lys	Asn	Thr	Leu	Tyr
65															
Leu	Gln	Met	Asn	Ser	Leu	Arg	Ala	Glu	Asp	Thr	Ala	Val	Tyr	Tyr	Cys
Ala	Arg	Asp	Tyr	Tyr	Asp	Ser	Ser	Gly	Tyr	Ser	Tyr	Phe	Asp	Tyr	Trp
Gly	Gln	Gly	Thr	Gln	Val	Thr	Val	Ser	Ser						

<210> 82

<211> 321

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetically generated oligonucleotide

<400> 82

gacatccaga	tgaccaggc	tccactctcc	ctgtctgc	ctgtgggaga	cagagtcacc	60
atcaacttgc	gggcaagtca	gagcatttagc	agccatttaa	attggatata	gcggagacca	120
gggaaagccc	ctaagctcct	gatttatgct	gcatccagg	tgcaaagcgg	ggtcccatca	180
aggttcagt	gcagtggatc	tggacagat	ttcgctctca	ccatcagcag	tctacaacct	240
gaagatttg	cagcttactt	ctgtcaccag	agttccagta	cgcctccgac	tttcggccaa	300
gggaccacgg	tggaaatcaa	a				321

<210> 83
 <211> 107
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetically generated peptide

<400> 83
 Asp Ile Gln Met Thr Gln Ser Pro Leu Ser Leu Ser Ala Ser Val Gly
 1 5 10 15
 Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Ser Ile Ser Ser His
 20 25 30
 Leu Asn Trp Tyr Gln Arg Arg Pro Gly Lys Ala Pro Lys Leu Leu Ile
 35 40 45
 Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60
 Ser Gly Ser Gly Thr Asp Phe Ala Leu Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80
 Glu Asp Phe Ala Ala Tyr Phe Cys His Gln Ser Ser Ser Thr Pro Pro
 85 90 95
 Thr Phe Gly Gln Gly Thr Thr Val Glu Ile Lys
 100 105

<210> 84
 <211> 360
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetically generated oligonucleotide

<400> 84
 gaagttcaat tggtagagtc tggggcggt cttgttcagc ctgggtggtc tttacgtctt 60
 tcttgcgctg cttccggatt cactttctct ccttacggta tggattgggt tcgccaagct 120
 cctggtaaag gtttggagtg gtttcttct atctctcctt ctgggtggcac tactctttat 180
 gctgactccg ttaaaggctcg cttcaactatc tctagagaca actctaagaa tactctctac 240
 ttgcagatga acagcttaag ggctgaggac actgcagtct actattgtgc gagacaaaaa 300
 aggtcctcgtaggtgcttt tgatatctgg ggccaaaggga caatggtcac cgtctcaagc 360

<210> 85
 <211> 120
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetically generated peptide

<400> 85
 Glu Val Gln Leu Leu Glu Ser Gly Gly Leu Val Gln Pro Gly Gly
 1 5 10 15
 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Pro Tyr
 20 25 30
 Gly Met Asp Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45
 Ser Ser Ile Ser Pro Ser Gly Gly Thr Thr Leu Tyr Ala Asp Ser Val
 50 55 60

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr
 65 70 75 80
 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 Ala Arg Gln Lys Arg Ser Ser Leu Gly Ala Phe Asp Ile Trp Gly Gln
 100 105 110
 Gly Thr Met Val Thr Val Ser Ser
 115 120

<210> 86

<211> 319

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetically generated oligonucleotide

<400> 86

gactcaggcct	gcctccgtgt	ctgggtctcc	tggacagtcg	atcaccatct	cctgcactgg	60
aaccaggagt	gacgttggtg	gttatacgta	tgtctccctgg	taccaacacgc	acccaggcaa	120
agccccccaaa	ctcatgattt	atgagggtca	taatcgccccc	tctggggttt	ctaatcgctt	180
ctctggctcc	aagtctggca	acacggcctc	cctgaccatc	tctgggctcc	aggctgaaga	240
cgaggctgat	tattactgca	actcatatac	aagcagcagc	actaagatgt	tcggcggagg	300
gaccaggctg	accgtccct					319

<210> 87

<211> 110

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetically generated peptide

<400> 87

Gln	Ser	Val	Leu	Thr	Gln	Pro	Ala	Ser	Val	Ser	Gly	Ser	Pro	Gly	Gln
1	5				10						15				
Ser	Ile	Thr	Ile	Ser	Cys	Thr	Gly	Thr	Ser	Ser	Asp	Val	Gly	Gly	Tyr
	20					25					30				
Ser	Tyr	Val	Ser	Trp	Tyr	Gln	Gln	His	Pro	Gly	Lys	Ala	Pro	Lys	Leu
	35				40			45							
Met	Ile	Tyr	Glu	Val	Ser	Asn	Arg	Pro	Ser	Gly	Val	Ser	Asn	Arg	Phe
	50				55			60							
Ser	Gly	Ser	Lys	Ser	Gly	Asn	Thr	Ala	Ser	Leu	Thr	Ile	Ser	Gly	Leu
65			70			75					80				
Gln	Ala	Glu	Asp	Glu	Ala	Asp	Tyr	Tyr	Cys	Asn	Ser	Tyr	Thr	Ser	Ser
						85		90			95				
Ser	Thr	Lys	Met	Phe	Gly	Gly		Thr	Arg	Leu	Thr	Val	Leu		
			100				105				110				

<210> 88

<211> 348

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetically generated oligonucleotide

<400> 88
 gaagttcaat tgtagatc tggtggcggt ctgttcagc ctgggtggtc tttacgtctt 60
 tcttcgcgtg cttccggatt cacttctct aagtactcta tggagtgggt tcgccaagct 120
 cctggtaaag gtttggatg gtttctcgat atctatcctt ctgggtggccc tactcttat 180
 gctgactccg ttaaaggatcg ctcaactatc tctagagaca actctaagaa tactctctac 240
 ttgcagatga acagcttaag ggctgaggac actgcagtct actattgtgc gagagactct 300
 tacggcatgg acgtctgggg ccaagggacc acggtcaccg tctcaagc 348

<210> 89

<211> 116

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetically generated peptide

<400> 89

Glu	Val	Gln	Leu	Leu	Glu	Ser	Gly	Gly	Gly	Leu	Val	Gln	Pro	Gly	Gly
1															15
Ser	Leu	Arg	Leu	Ser	Cys	Ala	Ala	Ser	Gly	Phe	Thr	Phe	Ser	Lys	Tyr
															20
Ser	Met	Glu	Trp	Val	Arg	Gln	Ala	Pro	Gly	Lys	Gly	Leu	Glu	Trp	Val
															35
Ser	Arg	Ile	Tyr	Pro	Ser	Gly	Gly	Pro	Thr	Leu	Tyr	Ala	Asp	Ser	Val
															50
Lys	Gly	Arg	Phe	Thr	Ile	Ser	Arg	Asp	Asn	Ser	Lys	Asn	Thr	Leu	Tyr
															65
Leu	Gln	Met	Asn	Ser	Leu	Arg	Ala	Glu	Asp	Thr	Ala	Val	Tyr	Tyr	Cys
															80
Ala	Arg	Asp	Ser	Tyr	Gly	Met	Asp	Val	Trp	Gly	Gln	Gly	Thr	Thr	Val
															100
Thr	Val	Ser	Ser												110
															115

<210> 90

<211> 333

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetically generated oligonucleotide

<400> 90

gacatccaga	tgacccagtc	tccatcctcc	ctgcccgtca	cccctggaga	gccggcctcc	60
atccctgca	ggtctagtca	gagcctcctg	catagtaatg	gataacaacta	tttgattgg	120
tacctgcaga	agccagggca	gtctccacag	ctcctgatct	atttgggttc	taatcgggccc	180
tccggggtcc	ctgacaggtt	cagtggcagt	ggatcaggca	cagatttac	actgaaaatc	240
aacagagtgg	aggctgagga	tgttgggggtt	tattactgca	tgcaagctct	acaaactccg	300
acggtcggcc	aagggaccaa	ggtggaaatc	aaa			333

<210> 91

<211> 111

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetically generated oligonucleotide

<400> 91

Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Pro Val Thr Pro Gly
 1 5 10 15
 Glu Pro Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Leu Leu His Ser
 20 25 30
 Asn Gly Tyr Asn Tyr Leu Asp Trp Tyr Leu Gln Lys Pro Gly Gln Ser
 35 40 45
 Pro Gln Leu Leu Ile Tyr Leu Gly Ser Asn Arg Ala Ser Gly Val Pro
 50 55 60
 Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Lys Ile
 65 70 75 80
 Asn Arg Val Glu Ala Glu Asp Val Gly Val Tyr Tyr Cys Met Gln Ala
 85 90 95
 Leu Gln Thr Pro Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
 100 105 110

<210> 92

<211> 348

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetically generated oligonucleotide

<400> 92

gaagttcaat	tgttagagtc	tggtggcggt	cttggtcagc	ctgggtggttc	tttacgtctt	60
tcttcgcgtg	cttccggatt	cactttctct	tattacggta	tgggttgggt	tcgc当地	120
cctggtaaaag	gtttggagtg	ggtttcttct	atcggtcctt	ctgggtggct	tactaattat	180
gctgactccg	ttaaaggctcg	cttcactatc	tctagagaca	actctaagaa	tactctctac	240
ttgcagatga	acagcttaag	ggctgaggac	actgcagtct	actattgtgc	gagaggcact	300
cgtacagtaa	ccaactgggg	ccagggaaacc	ctggtcaccg	tctcaagc		348

<210> 93

<211> 116

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetically generated peptide

<400> 93

Glu Val Gln Leu Leu Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
 1 5 10 15
 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Tyr Tyr
 20 25 30
 Gly Met Gly Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45
 Ser Ser Ile Gly Pro Ser Gly Gly Leu Thr Asn Tyr Ala Asp Ser Val
 50 55 60
 Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr
 65 70 75 80
 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 Ala Arg Gly Thr Arg Thr Val Thr Asn Trp Gly Gln Gly Thr Leu Val
 100 105 110
 Thr Val Ser Ser

115

<210> 94
 <211> 333
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetically generated oligonucleotide

<400> 94

gacatccaga tgacctcgtca cccctggagg gcccgcctcc
 atctcctgca ggtcttagtca gagcctcctg catagtaatg gataacaacta tttggattgg
 tacctgcaga agccaggggca gtctccacag ctcctgatct atttgggttc taatcggggcc
 tccggggtcc ctgacaggtt cagtggcagt ggatcaggca cagatttac actgaaaatc
 agcagagtgaa aggctgagga tgttgggtt tattactgca tgcaagctct gcaaccgtac
 actttggcc aggggaccaa gctggagatc aaa

60
 120
 180
 240
 300
 333

<210> 95
 <211> 111
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetically generated peptide

<400> 95

Asp Ile Gln Met Thr Gln Ser Pro Leu Ser Leu Pro Val Thr Pro Gly
 1 5 10 15
 Gly Pro Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Leu Leu His Ser
 20 25 30
 Asn Gly Tyr Asn Tyr Leu Asp Trp Tyr Leu Gln Lys Pro Gly Gln Ser
 35 40 45
 Pro Gln Leu Leu Ile Tyr Leu Gly Ser Asn Arg Ala Ser Gly Val Pro
 50 55 60
 Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Lys Ile
 65 70 75 80
 Ser Arg Val Glu Ala Glu Asp Val Gly Val Tyr Tyr Cys Met Gln Ala
 85 90 95
 Leu Gln Pro Tyr Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys
 100 105 110

120
 180
 240
 300

<210> 96
 <211> 369
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetically generated oligonucleotide

<400> 96

gaagttcaat tggtagagtc tggtggcggt cttgttcagc ctgggtggttc tttacgtctt
 tcttgcgtcg ctccggatt cactttctct ccttacctta tgtctgggt tcggccaagct
 cctggtaaaag gtttggatgt ggtttcttctt atctattctt ctgggtggcct tactgattat
 gctgactccg ttaaaggctcg cttaactatc tctagagaca actctaaagaa tactctctac
 ttgcagatga acagcttaag ggctgaggac actgcagtct tactattgtgc gagagacgg
 tactatgata gtagtggta cgagggtttt gactactggg gcccggaaac cttggtcacc

60
 120
 180
 240
 300
 360

gtctcaagc 369

<210> 97
 <211> 123
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetically generated peptide

<400> 97

Glu	Val	Gln	Leu	Leu	Glu	Ser	Gly	Gly	Gly	Leu	Val	Gln	Pro	Gly	Gly
1															
														15	
Ser	Leu	Arg	Leu	Ser	Cys	Ala	Ala	Ser	Gly	Phe	Thr	Phe	Ser	Pro	Tyr
														30	
Leu	Met	Ser	Trp	Val	Arg	Gln	Ala	Pro	Gly	Lys	Gly	Leu	Glu	Trp	Val
														45	
Ser	Ser	Ile	Tyr	Ser	Ser	Gly	Gly	Leu	Thr	Asp	Tyr	Ala	Asp	Ser	Val
														60	
Lys	Gly	Arg	Phe	Thr	Ile	Ser	Arg	Asp	Asn	Ser	Lys	Asn	Thr	Leu	Tyr
														80	
Leu	Gln	Met	Asn	Ser	Leu	Arg	Ala	Glu	Asp	Thr	Ala	Val	Tyr	Tyr	Cys
														95	
Ala	Arg	Asp	Gly	Tyr	Tyr	Asp	Ser	Ser	Gly	Tyr	Glu	Gly	Phe	Asp	Tyr
														110	
Trp	Gly	Gln	Gly	Thr	Leu	Val	Thr	Val	Ser	Ser					
														120	

<210> 98
 <211> 5
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Exemplary motif

<221> VARIANT
 <222> 1
 <223> Xaa =Glu, Leu or Pro

<221> VARIANT
 <222> 3
 <223> Xaa = Gly, Arg, or Leu

<221> VARIANT
 <222> 5
 <223> Xaa = Gly, Arg, or Ser

<400> 98

Xaa	Tyr	Xaa	Met	Xaa
1				5

<210> 99
 <211> 17
 <212> PRT
 <213> Artificial Sequence

<220>
<223> Exemplary motif

<221> VARIANT
<222> 3, 2, 10
<223> Xaa = any amino acid

<221> VARIANT
<222> 8
<223> Xaa = hydrophobic

<400> 99
Ser Ile Xaa Xaa Ser Gly Gly Xaa Thr Xaa Tyr Ala Asp Ser Val Lys
1 5 10 15
Gly

<210> 100
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Exemplary sequence

<400> 100
Asp Val Gly Val Gly Ala Ala Asp
1 5

<210> 101
<211> 13
<212> PRT
<213> Artificial Sequence

<220>
<223> Exemplary sequence

<400> 101
Asp Gly Tyr Tyr Asp Ser Ser Gly Tyr Glu Gly Phe Asp
1 5 10

<210> 102
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Exemplary sequence

<400> 102
Arg Ser Gly Ser Tyr Pro Ala Asp
1 5

<210> 103
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<223> Exemplary sequence

<400> 103
Asp Arg Ala Ala Ala
1 5

<210> 104
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> Exemplary sequence

<400> 104
Gly Trp Ser Ser Gln Pro Ala
1 5

<210> 105
<211> 12
<212> PRT
<213> Artificial Sequence

<220>
<223> Exemplary sequence

<400> 105
Asp Tyr Tyr Asp Ser Ser Gly Tyr Ser Tyr Phe Asp
1 5 10

<210> 106
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> Exemplary sequence

<400> 106
Gln Lys Arg Ser Ser Leu Gly Ala Phe Asp
1 5 10

<210> 107
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> Exemplary sequence

<400> 107
Asp Ser Tyr Gly Met Asp
1 5

<210> 108

<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> Exemplary sequence

<400> 108
Gly Thr Arg Thr Val Thr
1 5

<210> 109
<211> 11
<212> PRT
<213> Artificial Sequence

<220>
<223> Exemplary motif

<221> VARIANT
<222> 7
<223> Xaa = any amino acid (e.g., Gly or Ser)

<221> VARIANT
<222> 9
<223> Xaa = any amino acid (e.g., Tyr or His)

<400> 109
Arg Ala Ser Gln Ser Ile Xaa Ser Xaa Leu Asn
1 5 10

<210> 110
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> Exemplary sequence

<400> 110
Ala Ser Ser Leu Gln Ser
1 5

<210> 111
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> Exemplary motif

<221> VARIANT
<222> 1
<223> Xaa = any amino acid (e.g., hydrophilic, e.g., Gln or His)

<221> VARIANT

<222> 4
<223> Xaa = any amino acid (e.g., Tyr or Ser)

<221> VARIANT
<222> 8
<223> Xaa = any amino acid (e.g., Arg or Pro)

<400> 111
Xaa Gln Ser Xaa Ser Thr Pro Xaa Thr
1 5

<210> 112
<211> 14
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetically generated sequence

<400> 112
Thr Gly Thr Ser Ser Asp Val Gly Gly Tyr Ser Tyr Val Ser
1 5 10

<210> 113
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetically generated sequence

<400> 113
Glu Val Ser Asn Arg Pro
1 5

<210> 114
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetically generated sequence

<400> 114
Asn Ser Tyr Thr Ser Ser Ser Thr Lys Met
1 5 10

<210> 115
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<223> Exemplary sequence

<400> 115
Leu Tyr Arg Met Arg

1 5

<210> 116
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<223> Exemplary sequence

<400> 116
Pro Tyr Leu Met Ser
1 5

<210> 117
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<223> Exemplary sequence

<400> 117
Glu Tyr Gly Met Gly
1 5

<210> 118
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<223> Exemplary motif

<221> VARIANT
<222> 3
<223> Xaa = any amino acid (e.g., valine, serine, or tyrosine)

<221> VARIANT
<222> 4
<223> Xaa = any amino acid (e.g., proline or serine)

<221> VARIANT
<222> 8
<223> Xaa = hydrophobic (e.g., phenylalanine, isoleucine, leucine, valine, methionine, tryptophan, or tyrosine)

<221> VARIANT
<222> 10
<223> Xaa = any amino acid (e.g., phenylalanine, aspartic acid, glutamic acid, or acidic or aromatic)

<400> 118
Ser Ile Xaa Xaa Ser Gly Gly Xaa Thr Xaa Tyr Ala Asp Ser Val Lys

1
Gly

5

10

15

<210> 119
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<223> Exemplary sequence

<400> 119
Ser Ile Ser Pro Ser Gly Gly Ile Thr Glu Tyr Ala Asp Ser Val Lys
1 5 10 15
Gly

<210> 120
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<223> Exemplary sequence

<400> 120
Ser Ile Tyr Ser Ser Gly Gly Leu Thr Asp Tyr Ala Asp Ser Val Lys
1 5 10 15
Gly

<210> 121
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<223> Exemplary sequence

<400> 121
Ser Ile Val Ser Ser Gly Gly Phe Thr Phe Tyr Ala Asp Ser Val Lys
1 5 10 15
Gly

<210> 122
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> Synhetically generated peptide

<400> 122
Arg Ser Ser Gln Ser Leu Leu His Ser Asn Gly Tyr Asn Tyr Leu Asp
1 5 10 15

<210> 123
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> Synhetically generated peptide

<400> 123
Leu Gly Ser Asn Arg Ala Ser
1 5

<210> 124
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> Exemplary motif

<221> VARIANT
<222> 6
<223> Xaa = any amino acid, (e.g., threonine) or absent

<221> VARIANT
<222> 8
<223> Xaa = any amino acid (e.g., hydrophobic, e.g., tryptophan, proline or phenylalanine, tyrosine, or arginine) or absent

<400> 124
Met Gln Ala Leu Gln Xaa Pro Xaa Thr
1 5

<210> 125
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Exemplary sequence

<400> 125
Met Gln Ala Leu Gln Pro Tyr Thr
1 5

<210> 126
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> Exemplary sequence

<400> 126
Met Gln Ala Leu Gln Thr Pro Trp Thr

1 5

<210> 127
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> Exemplary sequence

<400> 127
Met Gln Ala Leu Gln Thr Pro Pro Thr
1 5

<210> 128
<211> 23
<212> PRT
<213> Artificial Sequence

<220>
<223> Exemplary motif

<221> VARIANT
<222> 9
<223> Xaa = Leu or Ser

<221> VARIANT
<222> 12
<223> Xaa = Pro or Ser

<221> VARIANT
<222> 13
<223> Xaa = small amino acid (e.g., fewer than four side chain carbons, e.g., Ala, Val, or Gly)

<221> VARIANT
<222> 14
<223> Xaa = Thr or Ser

<221> VARIANT
<222> 15
<223> Xaa = Val or Pro

<221> VARIANT
<222> 17
<223> Xaa = Glu, Asp, or Gly

<221> VARIANT
<222> 18
<223> Xaa = Pro or Arg

<221> VARIANT
<222> 19
<223> Xaa = Ala or Val

<221> VARIANT
<222> 20, 22

<223> Xaa = Ser or Thr

<400> 128

Asp Ile Gln Met Thr Gln Ser Pro Xaa Ser Leu Xaa Xaa Xaa Xaa Gly
1 5 10 15
Xaa Xaa Xaa Xaa Ile Xaa Cys
20

<210> 129

<211> 23

<212> PRT

<213> Artificial Sequence

<220>

<223> Exemplary motif

<221> VARIANT

<222> 9

<223> Xaa = Leu or Ser

<221> VARIANT

<222> 13

<223> Xaa = small amino acid (e.g., fewer than four side chain carbons, e.g., Ala, Val, or Gly)

<221> VARIANT

<222> 14

<223> Xaa = Thr or Ser

<221> VARIANT

<222> 15

<223> Xaa = Val or Pro

<221> VARIANT

<222> 17

<223> Xaa = Ala, Val, or Ile

<221> VARIANT

<222> 17

<223> Xaa = Glu, Asp, or Gly

<221> VARIANT

<222> 18

<223> Xaa = Pro or Arg

<221> VARIANT

<222> 19

<223> Xaa = Ala or Val

<221> VARIANT

<222> 20, 22

<223> Xaa = Ser or Thr

<400> 129

Asp Ile Gln Met Thr Gln Ser Pro Xaa Ser Leu Pro Xaa Xaa Xaa Gly
1 5 10 15

Xaa Xaa Xaa Xaa Ile Xaa Cys
20

<210> 130
<211> 23
<212> PRT
<213> Artificial Sequence

<220>
<223> Exemplary motif

<221> VARIANT
<222> 9
<223> Xaa = any amino acid (e. g., leucine or serine)

<221> VARIANT
<222> 17
<223> Xaa = any amino acid (e.g., glycine or glutamic acid)

<400> 130
Asp Ile Gln Met Thr Gln Ser Pro Xaa Ser Leu Pro Val Thr Pro Gly
1 5 10 15
Xaa Pro Ala Ser Ile Ser Cys
20

<210> 131
<211> 15
<212> PRT
<213> Artificial Sequence

<220>
<223> Exemplary motif

<221> VARIANT
<222> 3
<223> Xaa = Leu or Gln

<221> VARIANT
<222> 4
<223> Xaa = Gln or Arg

<221> VARIANT
<222> 5
<223> Xaa = Lys or Arg

<221> VARIANT
<222> 8, 11
<223> Xaa = Gln or Lys

<221> VARIANT
<222> 9
<223> Xaa = Ser or Ala

<400> 131
Trp Tyr Xaa Xaa Xaa Pro Gly Xaa Xaa Pro Xaa Leu Leu Ile Tyr
1 5 10 15

<210> 132

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetically generated peptide

<400> 132

Trp Tyr Leu Gln Lys Pro Gly Gln Ser Pro Gln Leu Leu Ile Tyr
 1 5 10 15

<210> 133

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetically generated peptide

<400> 133

Trp Tyr Gln Arg Arg Pro Gly Lys Ala Pro Lys Leu Leu Ile Tyr
 1 5 10 15

<210> 134

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetically generated peptide

<221> VARIANT

<222> 4

<223> Xaa = Asp or Ser

<400> 134

Gly Val Pro Xaa Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe
 1 5 10 15

<210> 135

<211> 32

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetically generated peptide

<400> 135

Gly Val Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr
 1 5 10 15

Leu Lys Ile Ser Arg Val Glu Ala Glu Asp Val Gly Val Tyr Tyr Cys
 20 25 30

<210> 136

<211> 32

<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetically generated peptide

<221> VARIANT
<222> 4
<223> Xaa = any amino acid (e.g., Asp or Ser)

<221> VARIANT
<222> 16
<223> Xaa = any amino acid (e.g., Thr or Ala)

<221> VARIANT
<222> 18
<223> Xaa = any amino acid (e.g., Lys or Thr)

<221> VARIANT
<222> 20
<223> Xaa = amino acid (e.g., Ser or Asn)

<221> VARIANT
<222> 21
<223> Xaa = any amino acid (e.g., Arg, Gly, or Ser)

<221> VARIANT
<222> 22
<223> Xaa = any amino acid (e.g., Val or Leu)

<221> VARIANT
<222> 23
<223> Xaa = any amino acid (e.g., Glu or Gln)

<221> VARIANT
<222> 24
<223> Xaa = any amino acid (e.g., Ala or Pro)

<221> VARIANT
<222> 27
<223> Xaa = any amino acid (e.g., Val or Phe)

<221> VARIANT
<222> 28
<223> Xaa = any amino acid (e.g., Gly or Ala)

<221> VARIANT
<222> 29
<223> Xaa = any amino acid (Val, Thr, or Ala)

<221> VARIANT
<222> 31
<223> Xaa = aromatic

<400> 136
Gly Val Pro Xaa Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Xaa
1 5 10 15

Leu Xaa Ile Xaa Xaa Xaa Xaa Xaa Glu Asp Xaa Xaa Xaa Tyr Xaa Cys
20 25 30

<210> 137
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetically generated peptide

<221> VARIANT
<222> 3
<223> Xaa = any amino acid (e.g., Gly, Gln, or Pro)

<221> VARIANT
<222> 6
<223> Xaa = Lys, Thr, or Arg

<221> VARIANT
<222> 7
<223> Xaa = hydrophobic (e.g., aliphatic, e.g., Val or Leu)

<221> VARIANT
<222> 8
<223> Xaa = hydrophilic (e.g., Glu, Asp, or Thr)

<400> 137
Phe Gly Xaa Gly Thr Xaa Xaa Xaa Ile Lys
1 5 10

<210> 138
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetically generated peptide

<221> VARIANT
<222> 3
<223> Xaa = glycine or glutamine

<221> VARIANT
<222> 7
<223> Xaa = hydrophobic (e.g., leucine or valine)

<400> 138
Phe Gly Xaa Gly Thr Lys Xaa Glu Ile Lys
1 5 10

<210> 139
<211> 30
<212> PRT
<213> Artificial Sequence

<220>

<223> Synthetically generated peptide

<400> 139

Glu	Val	Gln	Leu	Leu	Glu	Ser	Gly	Gly	Gly	Leu	Val	Gln	Pro	Gly	Gly
1				5				10					15		
Ser	Leu	Arg	Leu	Ser	Cys	Ala	Ala	Ser	Gly	Phe	Thr	Phe	Ser		
				20				25					30		

<210> 140

<211> 14

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetically generated peptide

<400> 140

Trp	Val	Arg	Gln	Ala	Pro	Gly	Lys	Gly	Leu	Glu	Trp	Val	Ser
1				5				10					

<210> 141

<211> 32

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetically generated peptide

<221> VARIANT

<222> 29

<223> Xaa = any amino acid, e.g., tyrosine or histidine

<221> VARIANT

<222> 32

<223> Xaa = any amino acid, e.g., arginine, glycine or leucine

<400> 141

Arg	Phe	Thr	Ile	Ser	Arg	Asp	Asn	Ser	Lys	Asn	Thr	Leu	Tyr	Leu	Gln
1				5				10					15		
Met	Asn	Ser	Leu	Arg	Ala	Glu	Asp	Thr	Ala	Val	Tyr	Xaa	Cys	Ala	Xaa
				20				25					30		

<210> 142

<211> 11

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetically generated peptide

<221> VARIANT

<222> 1

<223> Xaa = any amino acid (e.g., asparagine or tyrosine)

<221> VARIANT
 <222> 6
 <223> Xaa = any amino acid (e.g., alanine or threonine)

<400> 142
 Xaa Trp Gly Gln Gly Xaa Leu Val Thr Val Ser
 1 5 10

<210> 143
 <211> 12
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetically generated peptide

<400> 143
 Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
 1 5 10

<210> 144
 <211> 238
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetically generated peptide

<400> 144
 Met Gly Trp Ser Cys Ile Ile Leu Phe Leu Val Ala Thr Ala Thr Gly
 1 5 10 15
 Val His Ser Asp Ile Gln Met Thr Gln Ser Pro Leu Ser Leu Pro Val
 20 25 30
 Thr Pro Gly Glu Pro Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Leu
 35 40 45
 Leu His Ser Asn Gly Tyr Asn Tyr Leu Asp Trp Tyr Leu Gln Lys Pro
 50 55 60
 Gly Gln Ser Pro Gln Leu Leu Ile Tyr Leu Gly Ser Asn Arg Ala Ser
 65 70 75 80
 Gly Val Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr
 85 90 95
 Leu Lys Ile Ser Arg Val Glu Ala Glu Asp Val Gly Val Tyr Tyr Cys
 100 105 110
 Met Gln Ala Leu Gln Thr Pro Pro Thr Phe Gly Gly Thr Lys Val
 115 120 125
 Glu Ile Lys Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro
 130 135 140
 Ser Asp Glu Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu
 145 150 155 160
 Asn Asn Phe Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn
 165 170 175
 Ala Leu Gln Ser Gly Asn Ser Gln Glu Ser Val Thr Glu Gln Asp Ser
 180 185 190
 Lys Asp Ser Thr Tyr Ser Leu Ser Ser Thr Leu Thr Leu Ser Lys Ala
 195 200 205
 Asp Tyr Glu Lys His Lys Val Tyr Ala Cys Glu Val Thr His Gln Gly
 210 215 220

Leu Ser Ser Pro Val Thr Lys Ser Phe Asn Arg Gly Glu Cys
 225 230 235

<210> 145

<211> 238

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetically generated peptide

<400> 145

Met Gly Trp Ser Cys Ile Ile Leu Phe Leu Val Ala Thr Ala Thr Gly
 1 5 10 15
 Val His Ser Asp Ile Gln Met Thr Gln Ser Pro Leu Ser Leu Pro Val
 20 25 30
 Thr Pro Gly Glu Pro Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Leu
 35 40 45
 Leu His Ser Asn Gly Tyr Asn Tyr Leu Asp Trp Tyr Leu Gln Lys Pro
 50 55 60
 Gly Gln Ser Pro Gln Leu Leu Ile Tyr Leu Gly Ser Asn Arg Ala Ser
 65 70 75 80
 Gly Val Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr
 85 90 95
 Leu Lys Ile Ser Arg Val Glu Ala Glu Asp Val Gly Val Tyr Tyr Cys
 100 105 110
 Met Gln Ala Leu Gln Thr Pro Trp Thr Phe Gly Gln Gly Thr Lys Leu
 115 120 125
 Glu Ile Lys Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro
 130 135 140
 Ser Asp Glu Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu
 145 150 155 160
 Asn Asn Phe Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn
 165 170 175
 Ala Leu Gln Ser Gly Asn Ser Gln Glu Ser Val Thr Glu Gln Asp Ser
 180 185 190
 Lys Asp Ser Thr Tyr Ser Leu Ser Ser Thr Leu Thr Leu Ser Lys Ala
 195 200 205
 Asp Tyr Glu Lys His Lys Val Tyr Ala Cys Glu Val Thr His Gln Gly
 210 215 220
 Leu Ser Ser Pro Val Thr Lys Ser Phe Asn Arg Gly Glu Cys
 225 230 235

<210> 146

<211> 237

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetically generated peptide

<400> 146

Met Gly Trp Ser Cys Ile Ile Leu Phe Leu Val Ala Thr Ala Thr Gly
 1 5 10 15
 Val His Ser Asp Ile Gln Met Thr Gln Ser Pro Leu Ser Leu Pro Val
 20 25 30
 Thr Pro Gly Gly Pro Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Leu

35	40	45	
Leu His Ser Asn Gly Tyr Asn Tyr Leu Asp Trp Tyr Leu Gln Lys Pro			
50	55	60	
Gly Gln Ser Pro Gln Leu Leu Ile Tyr Leu Gly Ser Asn Arg Ala Ser			
65	70	75	80
Gly Val Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr			
85	90	95	
Leu Lys Ile Ser Arg Val Glu Ala Glu Asp Val Gly Val Tyr Tyr Cys			
100	105	110	
Met Gln Ala Leu Gln Pro Tyr Thr Phe Gly Gln Gly Thr Lys Leu Glu			
115	120	125	
Ile Lys Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser			
130	135	140	
Asp Glu Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn			
145	150	155	160
Asn Phe Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala			
165	170	175	
Leu Gln Ser Gly Asn Ser Gln Glu Ser Val Thr Glu Gln Asp Ser Lys			
180	185	190	
Asp Ser Thr Tyr Ser Leu Ser Ser Thr Leu Thr Leu Ser Lys Ala Asp			
195	200	205	
Tyr Glu Lys His Lys Val Tyr Ala Cys Glu Val Thr His Gln Gly Leu			
210	215	220	
Ser Ser Pro Val Thr Lys Ser Phe Asn Arg Gly Glu Cys			
225	230	235	

<210> 147

<211> 238

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetically generated peptide

<400> 147

Met Gly Trp Ser Cys Ile Ile Leu Phe Leu Val Ala Thr Ala Thr Gly			
1	5	10	15
Val His Ser Asp Ile Gln Met Thr Gln Ser Pro Leu Ser Leu Pro Val			
20	25	30	
Thr Pro Gly Glu Pro Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Leu			
35	40	45	
Leu His Ser Asn Gly Tyr Asn Tyr Leu Asp Trp Tyr Leu Gln Lys Pro			
50	55	60	
Gly Gln Ser Pro Gln Leu Leu Ile Tyr Leu Gly Ser Asn Arg Ala Ser			
65	70	75	80
Gly Val Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr			
85	90	95	
Leu Lys Ile Ser Gly Val Glu Ala Glu Asp Val Gly Val Tyr Tyr Cys			
100	105	110	
Met Gln Ala Leu Gln Thr Gly Tyr Thr Phe Gly Gln Gly Thr Lys Leu			
115	120	125	
Glu Ile Lys Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro			
130	135	140	
Ser Asp Glu Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu			
145	150	155	160
Asn Asn Phe Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn			
165	170	175	

Ala Leu Gln Ser Gly Asn Ser Gln Glu Ser Val Thr Glu Gln Asp Ser
 180 185 190
 Lys Asp Ser Thr Tyr Ser Leu Ser Ser Thr Leu Thr Leu Ser Lys Ala
 195 200 205
 Asp Tyr Glu Lys His Lys Val Tyr Ala Cys Glu Val Thr His Gln Gly
 210 215 220
 Leu Ser Ser Pro Val Thr Lys Ser Phe Asn Arg Gly Glu Cys
 225 230 235

<210> 148
 <211> 238
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetically generated peptide

<400> 148

Met Gly Trp Ser Cys Ile Ile Leu Phe Leu Val Ala Thr Ala Thr Gly
 1 5 10 15
 Val His Ser Asp Ile Gln Met Thr Gln Ser Pro Leu Ser Leu Pro Val
 20 25 30
 Thr Pro Gly Glu Pro Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Leu
 35 40 45
 Leu His Ser Asn Gly Tyr Asn Tyr Leu Asp Trp Tyr Leu Gln Lys Pro
 50 55 60
 Gly Gln Ser Pro Gln Leu Leu Ile Tyr Leu Gly Ser Asn Arg Ala Ser
 65 70 75 80
 Gly Val Pro Asp Arg Phe Ser Gly Ser Gly Thr Asp Phe Thr
 85 90 95
 Leu Lys Ile Ser Arg Val Glu Ala Glu Asp Val Gly Val Tyr Tyr Cys
 100 105 110
 Met Gln Ala Leu Gln Thr Pro Arg Thr Phe Gly Gly Thr Lys Val
 115 120 125
 Glu Ile Lys Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro
 130 135 140
 Ser Asp Glu Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu
 145 150 155 160
 Asn Asn Phe Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn
 165 170 175
 Ala Leu Gln Ser Gly Asn Ser Gln Glu Ser Val Thr Glu Gln Asp Ser
 180 185 190
 Lys Asp Ser Thr Tyr Ser Leu Ser Ser Thr Leu Thr Leu Ser Lys Ala
 195 200 205
 Asp Tyr Glu Lys His Lys Val Tyr Ala Cys Glu Val Thr His Gln Gly
 210 215 220
 Leu Ser Ser Pro Val Thr Lys Ser Phe Asn Arg Gly Glu Cys
 225 230 235

<210> 149
 <211> 238
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetically generated peptide

<400> 149

Met	Gly	Trp	Ser	Cys	Ile	Ile	Leu	Phe	Leu	Val	Ala	Thr	Ala	Thr	Gly
1				5					10				15		
Val	His	Ser	Asp	Ile	Gln	Met	Thr	Gln	Ser	Pro	Leu	Ser	Leu	Pro	Val
				20				25				30			
Thr	Pro	Gly	Glu	Pro	Ala	Ser	Ile	Ser	Cys	Arg	Ser	Ser	Gln	Ser	Leu
				35				40			45				
Leu	His	Ser	Asn	Gly	Tyr	Asn	Tyr	Leu	Asp	Trp	Tyr	Leu	Gln	Lys	Pro
				50				55			60				
Gly	Gln	Ser	Pro	Gln	Leu	Leu	Ile	Tyr	Leu	Gly	Ser	Asn	Arg	Ala	Ser
				65				70		75		80			
Gly	Val	Pro	Asp	Arg	Phe	Ser	Gly	Ser	Gly	Ser	Gly	Thr	Asp	Phe	Thr
				85				90			95				
Leu	Lys	Ile	Ser	Arg	Val	Glu	Ala	Glu	Asp	Val	Gly	Val	Tyr	Tyr	Cys
				100				105			110				
Met	Gln	Ala	Leu	Gln	Thr	Pro	Trp	Thr	Phe	Gly	Gln	Gly	Thr	Lys	Val
				115				120			125				
Glu	Ile	Lys	Arg	Thr	Val	Ala	Ala	Pro	Ser	Val	Phe	Ile	Phe	Pro	Pro
				130				135			140				
Ser	Asp	Glu	Gln	Leu	Lys	Ser	Gly	Thr	Ala	Ser	Val	Val	Cys	Leu	Leu
				145				150		155			160		
Asn	Asn	Phe	Tyr	Pro	Arg	Glu	Ala	Lys	Val	Gln	Trp	Lys	Val	Asp	Asn
				165				170			175				
Ala	Leu	Gln	Ser	Gly	Asn	Ser	Gln	Glu	Ser	Val	Thr	Glu	Gln	Asp	Ser
				180				185			190				
Lys	Asp	Ser	Thr	Tyr	Ser	Leu	Ser	Ser	Thr	Leu	Thr	Leu	Ser	Lys	Ala
				195				200			205				
Asp	Tyr	Glu	Lys	His	Lys	Val	Tyr	Ala	Cys	Glu	Val	Thr	His	Gln	Gly
				210				215			220				
Leu	Ser	Ser	Pro	Val	Thr	Lys	Ser	Phe	Asn	Arg	Gly	Glu	Cys		
				225				230			235				

<210> 150

<211> 233

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetically generated peptide

<400> 150

Met	Gly	Trp	Ser	Cys	Ile	Ile	Leu	Phe	Leu	Val	Ala	Thr	Ala	Thr	Gly
1				5					10			15			
Val	His	Ser	Asp	Ile	Gln	Met	Thr	Gln	Ser	Pro	Ser	Ser	Leu	Ser	Ala
				20				25			30				
Ser	Val	Gly	Asp	Arg	Val	Thr	Ile	Thr	Cys	Arg	Ala	Ser	Gln	Ser	Ile
				35				40			45				
Gly	Ser	Tyr	Leu	Asn	Trp	Tyr	Gln	Gln	Lys	Pro	Gly	Lys	Ala	Pro	Lys
				50				55			60				
Leu	Leu	Ile	Tyr	Ala	Ala	Ser	Ser	Leu	Gln	Ser	Gly	Val	Pro	Ser	Arg
				65				70		75		80			
Phe	Ser	Gly	Ser	Gly	Ser	Gly	Thr	Asp	Phe	Thr	Leu	Thr	Ile	Ser	Ser
				85				90			95				
Leu	Gln	Pro	Glu	Asp	Phe	Ala	Thr	Tyr	Tyr	Cys	Gln	Gln	Ser	Tyr	Ser
				100				105			110				
Thr	Pro	Arg	Thr	Phe	Gly	Pro	Gly	Thr	Lys	Val	Asp	Ile	Lys	Arg	Thr
				115				120			125				

Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu
 130 135 140
 Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr Pro
 145 150 155 160
 Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly
 165 170 175
 Asn Ser Gln Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr
 180 185 190
 Ser Leu Ser Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His
 195 200 205
 Lys Val Tyr Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val
 210 215 220
 Thr Lys Ser Phe Asn Arg Gly Glu Cys
 225 230

<210> 151

<211> 233

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetically generated peptide

<400> 151

Met Gly Trp Ser Cys Ile Ile Leu Phe Leu Val Ala Thr Ala Thr Gly
 1 5 10 15
 Val His Ser Asp Ile Gln Met Thr Gln Ser Pro Leu Ser Leu Ser Ala
 20 25 30
 Ser Val Gly Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Ser Ile
 35 40 45
 Ser Ser His Leu Asn Trp Tyr Gln Arg Arg Pro Gly Lys Ala Pro Lys
 50 55 60
 Leu Leu Ile Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg
 65 70 75 80
 Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Ala Leu Thr Ile Ser Ser
 85 90 95
 Leu Gln Pro Glu Asp Phe Ala Ala Tyr Phe Cys His Gln Ser Ser Ser
 100 105 110
 Thr Pro Pro Thr Phe Gly Gln Gly Thr Thr Val Glu Ile Lys Arg Thr
 115 120 125
 Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu
 130 135 140
 Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr Pro
 145 150 155 160
 Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly
 165 170 175
 Asn Ser Gln Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr
 180 185 190
 Ser Leu Ser Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His
 195 200 205
 Lys Val Tyr Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val
 210 215 220
 Thr Lys Ser Phe Asn Arg Gly Glu Cys
 225 230

<210> 152

<211> 237

<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetically generated peptide

<400> 152

Met	Gly	Trp	Ser	Cys	Ile	Ile	Leu	Phe	Leu	Val	Ala	Thr	Ala	Thr	Gly
1				5					10					15	
Val	His	Ser	Asp	Ile	Gln	Met	Thr	Gln	Ser	Pro	Ser	Ser	Leu	Pro	Val
				20				25					30		
Thr	Pro	Gly	Glu	Pro	Ala	Ser	Ile	Ser	Cys	Arg	Ser	Ser	Gln	Ser	Leu
					35			40					45		
Leu	His	Ser	Asn	Gly	Tyr	Asn	Tyr	Leu	Asp	Trp	Tyr	Leu	Gln	Lys	Pro
					50			55				60			
Gly	Gln	Ser	Pro	Gln	Leu	Leu	Ile	Tyr	Leu	Gly	Ser	Asn	Arg	Ala	Ser
					65			70			75			80	
Gly	Val	Pro	Asp	Arg	Phe	Ser	Gly	Ser	Gly	Ser	Gly	Thr	Asp	Phe	Thr
					85				90					95	
Leu	Lys	Ile	Asn	Arg	Val	Glu	Ala	Glu	Asp	Val	Gly	Val	Tyr	Tyr	Cys
					100				105				110		
Met	Gln	Ala	Leu	Gln	Thr	Pro	Thr	Phe	Gly	Gln	Gly	Thr	Lys	Val	Glu
					115				120				125		
Ile	Lys	Arg	Thr	Val	Ala	Ala	Pro	Ser	Val	Phe	Ile	Phe	Pro	Pro	Ser
					130			135				140			
Asp	Glu	Gln	Leu	Lys	Ser	Gly	Thr	Ala	Ser	Val	Val	Cys	Leu	Leu	Asn
					145			150			155			160	
Asn	Phe	Tyr	Pro	Arg	Glu	Ala	Lys	Val	Gln	Trp	Lys	Val	Asp	Asn	Ala
					165				170				175		
Leu	Gln	Ser	Gly	Asn	Ser	Gln	Glu	Ser	Val	Thr	Glu	Gln	Asp	Ser	Lys
					180				185				190		
Asp	Ser	Thr	Tyr	Ser	Leu	Ser	Ser	Thr	Leu	Thr	Leu	Ser	Lys	Ala	Asp
					195				200				205		
Tyr	Glu	Lys	His	Lys	Val	Tyr	Ala	Cys	Glu	Val	Thr	His	Gln	Gly	Leu
					210			215				220			
Ser	Ser	Pro	Val	Thr	Lys	Ser	Phe	Asn	Arg	Gly	Glu	Cys			
					225			230			235				

<210> 153

<211> 237

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetically generated peptide

<400> 153

Met	Gly	Trp	Ser	Cys	Ile	Ile	Leu	Phe	Leu	Val	Ala	Thr	Ala	Thr	Gly
1				5					10					15	
Val	His	Ser	Asp	Ile	Gln	Met	Thr	Gln	Ser	Pro	Leu	Ser	Leu	Pro	Val
				20				25					30		
Thr	Pro	Gly	Gly	Pro	Ala	Ser	Ile	Ser	Cys	Arg	Ser	Ser	Gln	Ser	Leu
				35			40					45			
Leu	His	Ser	Asn	Gly	Tyr	Asn	Tyr	Leu	Asp	Trp	Tyr	Leu	Gln	Lys	Pro
				50			55				60				
Gly	Gln	Ser	Pro	Gln	Leu	Leu	Ile	Tyr	Leu	Gly	Ser	Asn	Arg	Ala	Ser
65				70					75					80	

Gly Val Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr
 85 90 95
 Leu Lys Ile Ser Arg Val Glu Ala Glu Asp Val Gly Val Tyr Tyr Cys
 100 105 110
 Met Gln Ala Leu Gln Pro Tyr Thr Phe Gly Gln Gly Thr Lys Leu Glu
 115 120 125
 Ile Lys Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser
 130 135 140
 Asp Glu Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn
 145 150 155 160
 Asn Phe Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala
 165 170 175
 Leu Gln Ser Gly Asn Ser Gln Glu Ser Val Thr Glu Gln Asp Ser Lys
 180 185 190
 Asp Ser Thr Tyr Ser Leu Ser Ser Thr Leu Thr Leu Ser Lys Ala Asp
 195 200 205
 Tyr Glu Lys His Lys Val Tyr Ala Cys Glu Val Thr His Gln Gly Leu
 210 215 220
 Ser Ser Pro Val Thr Lys Ser Phe Asn Arg Gly Glu Cys
 225 230 235

<210> 154

<211> 235

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetically generated peptide

<400> 154

Met Gly Trp Ser Cys Ile Ile Leu Phe Leu Val Ala Thr Ala Thr Gly
 1 5 10 15
 Val His Ser Gln Ser Val Leu Thr Gln Pro Ala Ser Val Ser Gly Ser
 20 25 30
 Pro Gly Gln Ser Ile Thr Ile Ser Cys Thr Gly Thr Ser Ser Asp Val
 35 40 45
 Gly Gly Tyr Ser Tyr Val Ser Trp Tyr Gln Gln His Pro Gly Lys Ala
 50 55 60
 Pro Lys Leu Met Ile Tyr Glu Val Ser Asn Arg Pro Ser Gly Val Ser
 65 70 75 80
 Asn Arg Phe Ser Gly Ser Lys Ser Gly Asn Thr Ala Ser Leu Thr Ile
 85 90 95
 Ser Gly Leu Gln Ala Glu Asp Glu Ala Asp Tyr Tyr Cys Asn Ser Tyr
 100 105 110
 Thr Ser Ser Thr Lys Met Phe Gly Gly Gly Thr Arg Leu Thr Val
 115 120 125
 Leu Gly Gln Pro Lys Ala Ala Pro Ser Val Thr Leu Phe Pro Pro Ser
 130 135 140
 Ser Glu Glu Leu Gln Ala Asn Lys Ala Thr Leu Val Cys Leu Ile Ser
 145 150 155 160
 Asp Phe Tyr Pro Gly Ala Val Thr Val Ala Trp Lys Ala Asp Gly Ser
 165 170 175
 Pro Val Lys Ala Gly Val Glu Thr Thr Lys Pro Ser Lys Gln Ser Asn
 180 185 190
 Asn Lys Tyr Ala Ala Ser Ser Tyr Leu Ser Leu Thr Pro Glu Gln Trp
 195 200 205
 Lys Ser His Arg Ser Tyr Ser Cys Gln Val Thr His Glu Gly Ser Thr

210	215	220
Val Glu Lys Thr Val Ala Pro Ala Glu Cys Ser		
225	230	235

<210> 155
 <211> 462
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetically generated peptide

<400> 155

Met Gly Trp Ser Cys Ile Ile Leu Phe Leu Val Ala Thr Ala Thr Gly			
1	5	10	15
Ala His Ser Glu Val Gln Leu Leu Glu Ser Gly Gly Gly Leu Val Gln			
20	25	30	
Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe			
35	40	45	
Ser Glu Tyr Gly Met Gly Trp Val Arg Gln Ala Pro Gly Lys Gly Leu			
50	55	60	
Glu Trp Val Ser Ser Ile Val Ser Ser Gly Gly Phe Thr Phe Tyr Ala			
65	70	75	80
Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn			
85	90	95	
Thr Leu Tyr Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val			
100	105	110	
Tyr Tyr Cys Ala Arg Gly Thr Arg Thr Val Thr Asn Trp Gly Gln Gly			
115	120	125	
Ala Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val Phe			
130	135	140	
Pro Leu Ala Pro Cys Ser Arg Ser Thr Ser Glu Ser Thr Ala Ala Leu			
145	150	155	160
Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val Ser Trp			
165	170	175	
Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala Val Leu			
180	185	190	
Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val Pro Ser			
195	200	205	
Ser Ser Leu Gly Thr Lys Thr Tyr Thr Cys Asn Val Asp His Lys Pro			
210	215	220	
Ser Asn Thr Lys Val Asp Lys Arg Val Glu Ser Lys Tyr Gly Pro Pro			
225	230	235	240
Cys Pro Ser Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe			
245	250	255	
Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro			
260	265	270	
Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val			
275	280	285	
Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr			
290	295	300	
Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val			
305	310	315	320
Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys			
325	330	335	
Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser			
340	345	350	

Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
 355 360 365
 Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
 370 375 380
 Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly
 385 390 395 400
 Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
 405 410 415
 Gly Ser Phe Phe Leu Tyr Ser Arg Leu Thr Val Asp Lys Ser Arg Trp
 420 425 430
 Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
 435 440 445
 Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
 450 455 460

<210> 156

<211> 464

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetically generated peptide

<400> 156

Met Gly Trp Ser Cys Ile Ile Leu Phe Leu Val Ala Thr Ala Thr Gly
 1 5 10 15
 Ala His Ser Glu Val Gln Leu Leu Glu Ser Gly Gly Gly Leu Val Gln
 20 25 30
 Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe
 35 40 45
 Ser Leu Tyr Arg Met Arg Trp Val Arg Gln Ala Pro Gly Lys Gly Leu
 50 55 60
 Glu Trp Val Ser Ser Ile Ser Pro Ser Gly Gly Ile Thr Glu Tyr Ala
 65 70 75 80
 Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn
 85 90 95
 Thr Leu Tyr Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val
 100 105 110
 Tyr Tyr Cys Ala Leu Asp Val Gly Val Gly Ala Ala Asp Tyr Trp Gly
 115 120 125
 Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser
 130 135 140
 Val Phe Pro Leu Ala Pro Cys Ser Arg Ser Thr Ser Glu Ser Thr Ala
 145 150 155 160
 Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val
 165 170 175
 Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala
 180 185 190
 Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val
 195 200 205
 Pro Ser Ser Ser Leu Gly Thr Lys Thr Tyr Thr Cys Asn Val Asp His
 210 215 220
 Lys Pro Ser Asn Thr Lys Val Asp Lys Arg Val Glu Ser Lys Tyr Gly
 225 230 235 240
 Pro Pro Cys Pro Ser Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser
 245 250 255
 Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg

260	265	270
Thr Pro Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro		
275	280	285
Glu Val Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala		
290	295	300
Lys Thr Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val		
305	310	315
Ser Val Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr		
325	330	335
Lys Cys Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr		
340	345	350
Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu		
355	360	365
Pro Pro Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys		
370	375	380
Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser		
385	390	395
Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp		
405	410	415
Ser Asp Gly Ser Phe Phe Leu Tyr Ser Arg Leu Thr Val Asp Lys Ser		
420	425	430
Arg Trp Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala		
435	440	445
Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys		
450	455	460

<210> 157

<211> 469

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetically generated peptide

<400> 157

Met Gly Trp Ser Cys Ile Ile Leu Phe Leu Val Ala Thr Ala Thr Gly			
1	5	10	15
Ala His Ser Glu Val Gln Leu Leu Glu Ser Gly Gly Gly Leu Val Gln			
20	25	30	
Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe			
35	40	45	
Ser Pro Tyr Leu Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu			
50	55	60	
Glu Trp Val Ser Ser Ile Tyr Ser Ser Gly Gly Leu Thr Asp Tyr Ala			
65	70	75	80
Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn			
85	90	95	
Thr Leu Tyr Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val			
100	105	110	
Tyr His Cys Ala Arg Asp Gly Tyr Tyr Asp Ser Ser Gly Tyr Glu Gly			
115	120	125	
Phe Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser			
130	135	140	
Thr Lys Gly Pro Ser Val Phe Pro Leu Ala Pro Cys Ser Arg Ser Thr			
145	150	155	160
Ser Glu Ser Thr Ala Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro			
165	170	175	

Glu Pro Val Thr Val Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val
 180 185 190
 His Thr Phe Pro Ala Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser
 195 200 205
 Ser Val Val Thr Val Pro Ser Ser Ser Leu Gly Thr Lys Thr Tyr Thr
 210 215 220
 Cys Asn Val Asp His Lys Pro Ser Asn Thr Lys Val Asp Lys Arg Val
 225 230 235 240
 Glu Ser Lys Tyr Gly Pro Pro Cys Pro Ser Cys Pro Ala Pro Glu Phe
 245 250 255
 Leu Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr
 260 265 270
 Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val Asp Val
 275 280 285
 Ser Gln Glu Asp Pro Glu Val Gln Phe Asn Trp Tyr Val Asp Gly Val
 290 295 300
 Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Phe Asn Ser
 305 310 315 320
 Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln Asp Trp Leu
 325 330 335
 Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Gly Leu Pro Ser
 340 345 350
 Ser Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro
 355 360 365
 Gln Val Tyr Thr Leu Pro Pro Ser Gln Glu Glu Met Thr Lys Asn Gln
 370 375 380
 Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala
 385 390 395 400
 Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr
 405 410 415
 Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Arg Leu
 420 425 430
 Thr Val Asp Lys Ser Arg Trp Gln Glu Gly Asn Val Phe Ser Cys Ser
 435 440 445
 Val Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser
 450 455 460
 Leu Ser Leu Gly Lys
 465

<210> 158

<211> 464

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetically generated peptide

<400> 158

Met Gly Trp Ser Cys Ile Ile Leu Phe Leu Val Ala Thr Ala Thr Gly
 1 5 10 15
 Ala His Ser Glu Val Gln Leu Leu Glu Ser Gly Gly Gly Leu Val Gln
 20 25 30
 Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe
 35 40 45
 Ser Lys Tyr Thr Met Trp Trp Val Arg Gln Ala Pro Gly Lys Gly Leu
 50 55 60
 Glu Trp Val Ser Ser Ile Trp Ser Ser Gly Gly Phe Thr Arg Tyr Ala

65	70	75	80
Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn			
85	90	95	
Thr Leu Tyr Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val			
100	105	110	
Tyr Tyr Cys Ala Gly Arg Ser Gly Ser Tyr Pro Ala Asp Ile Trp Gly			
115	120	125	
Gln Gly Thr Met Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser			
130	135	140	
Val Phe Pro Leu Ala Pro Cys Ser Arg Ser Thr Ser Glu Ser Thr Ala			
145	150	155	160
Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val			
165	170	175	
Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala			
180	185	190	
Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val			
195	200	205	
Pro Ser Ser Ser Leu Gly Thr Lys Thr Tyr Thr Cys Asn Val Asp His			
210	215	220	
Lys Pro Ser Asn Thr Lys Val Asp Lys Arg Val Glu Ser Lys Tyr Gly			
225	230	235	240
Pro Pro Cys Pro Ser Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser			
245	250	255	
Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg			
260	265	270	
Thr Pro Glu Val Thr Cys Val Val Asp Val Ser Gln Glu Asp Pro			
275	280	285	
Glu Val Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala			
290	295	300	
Lys Thr Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val			
305	310	315	320
Ser Val Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr			
325	330	335	
Lys Cys Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr			
340	345	350	
Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu			
355	360	365	
Pro Pro Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys			
370	375	380	
Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser			
385	390	395	400
Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp			
405	410	415	
Ser Asp Gly Ser Phe Phe Leu Tyr Ser Arg Leu Thr Val Asp Lys Ser			
420	425	430	
Arg Trp Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala			
435	440	445	
Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys			
450	455	460	

<210> 159

<211> 460

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetically generated peptide

<400> 159

Met Gly Trp Ser Cys Ile Ile Leu Phe Leu Val Ala Thr Ala Thr Gly
 1 5 10 15
 Ala His Ser Glu Val Gln Leu Leu Glu Ser Gly Gly Gly Leu Val Gln
 20 25 30
 Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe
 35 40 45
 Ser His Tyr Ser Met Met Trp Val Arg Gln Ala Pro Gly Lys Gly Leu
 50 55 60
 Glu Trp Val Ser Ser Ile Phe Pro Gly Gly Trp Thr Leu Tyr Ala Asp
 65 70 75 80
 Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr
 85 90 95
 Leu Tyr Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr
 100 105 110
 Tyr Cys Ala Arg Asp Arg Ala Ala Tyr Trp Gly Gln Gly Thr Leu
 115 120 125
 Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val Phe Pro Leu
 130 135 140
 Ala Pro Cys Ser Arg Ser Thr Ser Glu Ser Thr Ala Ala Leu Gly Cys
 145 150 155 160
 Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val Ser Trp Asn Ser
 165 170 175
 Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala Val Leu Gln Ser
 180 185 190
 Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val Pro Ser Ser Ser
 195 200 205
 Leu Gly Thr Lys Thr Tyr Cys Asn Val Asp His Lys Pro Ser Asn
 210 215 220
 Thr Lys Val Asp Lys Arg Val Glu Ser Lys Tyr Gly Pro Pro Cys Pro
 225 230 235 240
 Ser Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe Leu Phe
 245 250 255
 Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
 260 265 270
 Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val Gln Phe
 275 280 285
 Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
 290 295 300
 Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr
 305 310 315 320
 Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
 325 330 335
 Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser Lys Ala
 340 345 350
 Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Gln
 355 360 365
 Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
 370 375 380
 Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro
 385 390 395 400
 Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
 405 410 415
 Phe Phe Leu Tyr Ser Arg Leu Thr Val Asp Lys Ser Arg Trp Gln Glu
 420 425 430
 Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His

435	440	445
Tyr Thr Gln Lys Ser Leu Ser	Leu Ser Lys	Gly Lys
450	455	460
<210> 160		
<211> 463		
<212> PRT		
<213> Artificial Sequence		
<220>		
<223> Synthetically generated peptide		
<400> 160		
Met Gly Trp Ser Cys Ile Ile Leu Phe Leu Val Ala Thr Ala Thr Gly		
1	5	10
Ala His Ser Glu Val Gln Leu Leu Glu Ser Gly Gly	Gly Leu Val Gln	
20	25	30
Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe		
35	40	45
Ser Asn Tyr Thr Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu		
50	55	60
Glu Trp Val Ser Ser Ile Val Ser Ser Gly Gly Phe Thr Lys Tyr Ala		
65	70	75
Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn		
85	90	95
Thr Ile Tyr Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val		
100	105	110
Tyr Tyr Cys Ala Arg Gly Trp Ser Ser Gln Pro Ala Ile Trp Gly Gln		
115	120	125
Gly Ser Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val		
130	135	140
Phe Pro Leu Ala Pro Cys Ser Arg Ser Thr Ser Glu Ser Thr Ala Ala		
145	150	155
Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val Ser		
165	170	175
Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala Val		
180	185	190
Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val Pro		
195	200	205
Ser Ser Ser Leu Gly Thr Lys Thr Tyr Thr Cys Asn Val Asp His Lys		
210	215	220
Pro Ser Asn Thr Lys Val Asp Lys Arg Val Glu Ser Lys Tyr Gly Pro		
225	230	235
Pro Cys Pro Ser Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val		
245	250	255
Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr		
260	265	270
Pro Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu		
275	280	285
Val Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys		
290	295	300
Thr Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser		
305	310	315
Val Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys		
325	330	335
Cys Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile		
340	345	350

Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro
 355 360 365
 Pro Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu
 370 375 380
 Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn
 385 390 395 400
 Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser
 405 410 415
 Asp Gly Ser Phe Phe Leu Tyr Ser Arg Leu Thr Val Asp Lys Ser Arg
 420 425 430
 Trp Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu
 435 440 445
 His Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
 450 455 460

<210> 161

<211> 468

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetically generated peptide

<400> 161

Met Gly Trp Ser Cys Ile Ile Leu Phe Leu Val Ala Thr Ala Thr Gly
 1 5 10 15
 Ala His Ser Glu Val Gln Leu Leu Glu Ser Gly Gly Gly Leu Val Gln
 20 25 30
 Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe
 35 40 45
 Ser Trp Tyr Ser Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu
 50 55 60
 Glu Trp Val Ser Ser Ile Gly Pro Ser Gly Gly Gln Thr Arg Tyr Ala
 65 70 75 80
 Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn
 85 90 95
 Thr Leu Tyr Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val
 100 105 110
 Tyr Tyr Cys Ala Arg Asp Tyr Tyr Asp Ser Ser Gly Tyr Ser Tyr Phe
 115 120 125
 Asp Tyr Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser Ala Ser Thr
 130 135 140
 Lys Gly Pro Ser Val Phe Pro Leu Ala Pro Cys Ser Arg Ser Thr Ser
 145 150 155 160
 Glu Ser Thr Ala Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu
 165 170 175
 Pro Val Thr Val Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His
 180 185 190
 Thr Phe Pro Ala Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser
 195 200 205
 Val Val Thr Val Pro Ser Ser Ser Leu Gly Thr Lys Thr Tyr Thr Cys
 210 215 220
 Asn Val Asp His Lys Pro Ser Asn Thr Lys Val Asp Lys Arg Val Glu
 225 230 235 240
 Ser Lys Tyr Gly Pro Pro Cys Pro Ser Cys Pro Ala Pro Glu Phe Leu
 245 250 255
 Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu

260	265	270
Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val Asp Val Ser		
275	280	285
Gln Glu Asp Pro Glu Val Gln Phe Asn Trp Tyr Val Asp Gly Val Glu		
290	295	300
Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr		
305	310	315
Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln Asp Trp Leu Asn		
325	330	335
Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Gly Leu Pro Ser Ser		
340	345	350
Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln		
355	360	365
Val Tyr Thr Leu Pro Pro Ser Gln Glu Glu Met Thr Lys Asn Gln Val		
370	375	380
Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val		
385	390	395
Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro		
405	410	415
Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Arg Leu Thr		
420	425	430
Val Asp Lys Ser Arg Trp Gln Glu Gly Asn Val Phe Ser Cys Ser Val		
435	440	445
Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser Leu		
450	455	460
Ser Leu Gly Lys		
465		

<210> 162

<211> 466

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetically generated peptide

<400> 162

Met Gly Trp Ser Cys Ile Ile Leu Phe Leu Val Ala Thr Ala Thr Gly			
1	5	10	15
Ala His Ser Glu Val Gln Leu Leu Glu Ser Gly Gly Gly Leu Val Gln			
20	25	30	
Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe			
35	40	45	
Ser Pro Tyr Gly Met Asp Trp Val Arg Gln Ala Pro Gly Lys Gly Leu			
50	55	60	
Glu Trp Val Ser Ser Ile Ser Pro Ser Gly Gly Thr Thr Leu Tyr Ala			
65	70	75	80
Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn			
85	90	95	
Thr Leu Tyr Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val			
100	105	110	
Tyr Tyr Cys Ala Arg Gln Lys Arg Ser Ser Leu Gly Ala Phe Asp Ile			
115	120	125	
Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Ala Ser Thr Lys Gly			
130	135	140	
Pro Ser Val Phe Pro Leu Ala Pro Cys Ser Arg Ser Thr Ser Glu Ser			
145	150	155	160

Thr Ala Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val
 165 170 175
 Thr Val Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe
 180 185 190
 Pro Ala Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val
 195 200 205
 Thr Val Pro Ser Ser Ser Leu Gly Thr Lys Thr Tyr Thr Cys Asn Val
 210 215 220
 Asp His Lys Pro Ser Asn Thr Lys Val Asp Lys Arg Val Glu Ser Lys
 225 230 235 240
 Tyr Gly Pro Pro Cys Pro Ser Cys Pro Ala Pro Glu Phe Leu Gly Gly
 245 250 255
 Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu Met Ile
 260 265 270
 Ser Arg Thr Pro Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu
 275 280 285
 Asp Pro Glu Val Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His
 290 295 300
 Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg
 305 310 315 320
 Val Val Ser Val Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys
 325 330 335
 Glu Tyr Lys Cys Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu
 340 345 350
 Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr
 355 360 365
 Thr Leu Pro Pro Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu
 370 375 380
 Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp
 385 390 395 400
 Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val
 405 410 415
 Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Arg Leu Thr Val Asp
 420 425 430
 Lys Ser Arg Trp Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His
 435 440 445
 Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu
 450 455 460
 Gly Lys
 465

<210> 163
 <211> 462
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetically generated peptide

<400> 163
 Met Gly Trp Ser Cys Ile Ile Leu Phe Leu Val Ala Thr Ala Thr Gly
 1 5 10 15
 Ala His Ser Glu Val Gln Leu Leu Glu Ser Gly Gly Leu Val Gln
 20 25 30
 Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe
 35 40 45
 Ser Tyr Tyr Gly Met Gly Trp Val Arg Gln Ala Pro Gly Lys Gly Leu

50	55	60													
Glu	Trp	Val	Ser	Ser	Ile	Gly	Pro	Ser	Gly	Gly	Leu	Thr	Asn	Tyr	Ala
65					70				75						80
Asp	Ser	Val	Lys	Gly	Arg	Phe	Thr	Ile	Ser	Arg	Asp	Asn	Ser	Lys	Asn
					85				90					95	
Thr	Leu	Tyr	Leu	Gln	Met	Asn	Ser	Leu	Arg	Ala	Glu	Asp	Thr	Ala	Val
					100				105					110	
Tyr	Tyr	Cys	Ala	Arg	Gly	Thr	Arg	Thr	Val	Thr	Asn	Trp	Gly	Gln	Gly
					115				120				125		
Thr	Leu	Val	Thr	Val	Ser	Ser	Ala	Ser	Thr	Lys	Gly	Pro	Ser	Val	Phe
					130				135				140		
Pro	Leu	Ala	Pro	Cys	Ser	Arg	Ser	Thr	Ser	Glu	Ser	Thr	Ala	Ala	Leu
145						150				155				160	
Gly	Cys	Leu	Val	Lys	Asp	Tyr	Phe	Pro	Glu	Pro	Val	Thr	Val	Ser	Trp
					165				170				175		
Asn	Ser	Gly	Ala	Leu	Thr	Ser	Gly	Val	His	Thr	Phe	Pro	Ala	Val	Leu
					180				185				190		
Gln	Ser	Ser	Gly	Leu	Tyr	Ser	Leu	Ser	Ser	Val	Val	Thr	Val	Pro	Ser
					195				200				205		
Ser	Ser	Leu	Gly	Thr	Lys	Thr	Tyr	Thr	Cys	Asn	Val	Asp	His	Lys	Pro
					210				215				220		
Ser	Asn	Thr	Lys	Val	Asp	Lys	Arg	Val	Glu	Ser	Lys	Tyr	Gly	Pro	Pro
225						230				235				240	
Cys	Pro	Ser	Cys	Pro	Ala	Pro	Glu	Phe	Leu	Gly	Gly	Pro	Ser	Val	Phe
					245				250				255		
Leu	Phe	Pro	Pro	Lys	Pro	Lys	Asp	Thr	Leu	Met	Ile	Ser	Arg	Thr	Pro
					260				265				270		
Glu	Val	Thr	Cys	Val	Val	Val	Asp	Val	Ser	Gln	Glu	Asp	Pro	Glu	Val
					275				280				285		
Gln	Phe	Asn	Trp	Tyr	Val	Asp	Gly	Val	Glu	Val	His	Asn	Ala	Lys	Thr
					290				295				300		
Lys	Pro	Arg	Glu	Glu	Gln	Phe	Asn	Ser	Thr	Tyr	Arg	Val	Val	Ser	Val
305						310				315				320	
Leu	Thr	Val	Leu	His	Gln	Asp	Trp	Leu	Asn	Gly	Lys	Glu	Tyr	Lys	Cys
					325				330				335		
Lys	Val	Ser	Asn	Lys	Gly	Leu	Pro	Ser	Ser	Ile	Glu	Lys	Thr	Ile	Ser
					340				345				350		
Lys	Ala	Lys	Gly	Gln	Pro	Arg	Glu	Pro	Gln	Val	Tyr	Thr	Leu	Pro	Pro
					355				360				365		
Ser	Gln	Glu	Glu	Met	Thr	Lys	Asn	Gln	Val	Ser	Leu	Thr	Cys	Leu	Val
					370				375				380		
Lys	Gly	Phe	Tyr	Pro	Ser	Asp	Ile	Ala	Val	Glu	Trp	Glu	Ser	Asn	Gly
385						390				395				400	
Gln	Pro	Glu	Asn	Asn	Tyr	Lys	Thr	Thr	Pro	Pro	Val	Leu	Asp	Ser	Asp
					405				410				415		
Gly	Ser	Phe	Phe	Leu	Tyr	Ser	Arg	Leu	Thr	Val	Asp	Lys	Ser	Arg	Trp
					420				425				430		
Gln	Glu	Gly	Asn	Val	Phe	Ser	Cys	Ser	Val	Met	His	Glu	Ala	Leu	His
					435				440				445		
Asn	His	Tyr	Thr	Gln	Lys	Ser	Leu	Ser	Leu	Ser	Leu	Gly	Lys		
					450				455				460		

<210> 164

<211> 469

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetically generated peptide

<400> 164

Met Gly Trp Ser Cys Ile Ile Leu Phe Leu Val Ala Thr Ala Thr Gly
 1 5 10 15
 Ala His Ser Glu Val Gln Leu Leu Glu Ser Gly Gly Gly Leu Val Gln
 20 25 30
 Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe
 35 40 45
 Ser Pro Tyr Leu Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu
 50 55 60
 Glu Trp Val Ser Ser Ile Tyr Ser Ser Gly Gly Leu Thr Asp Tyr Ala
 65 70 75 80
 Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn
 85 90 95
 Thr Leu Tyr Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val
 100 105 110
 Tyr Tyr Cys Ala Arg Asp Gly Tyr Tyr Asp Ser Ser Gly Tyr Glu Gly
 115 120 125
 Phe Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser
 130 135 140
 Thr Lys Gly Pro Ser Val Phe Pro Leu Ala Pro Cys Ser Arg Ser Thr
 145 150 155 160
 Ser Glu Ser Thr Ala Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro
 165 170 175
 Glu Pro Val Thr Val Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val
 180 185 190
 His Thr Phe Pro Ala Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser
 195 200 205
 Ser Val Val Thr Val Pro Ser Ser Leu Gly Thr Lys Thr Tyr Thr
 210 215 220
 Cys Asn Val Asp His Lys Pro Ser Asn Thr Lys Val Asp Lys Arg Val
 225 230 235 240
 Glu Ser Lys Tyr Gly Pro Pro Cys Pro Ser Cys Pro Ala Pro Glu Phe
 245 250 255
 Leu Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr
 260 265 270
 Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val Asp Val
 275 280 285
 Ser Gln Glu Asp Pro Glu Val Gln Phe Asn Trp Tyr Val Asp Gly Val
 290 295 300
 Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Phe Asn Ser
 305 310 315 320
 Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln Asp Trp Leu
 325 330 335
 Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Gly Leu Pro Ser
 340 345 350
 Ser Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro
 355 360 365
 Gln Val Tyr Thr Leu Pro Pro Ser Gln Glu Glu Met Thr Lys Asn Gln
 370 375 380
 Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala
 385 390 395 400
 Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr
 405 410 415
 Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Arg Leu

	420	425	430												
Thr	Val	Asp	Lys	Ser	Arg	Trp	Gln	Glu	Gly	Asn	Val	Phe	Ser	Cys	Ser
	435					440					445				
Val	Met	His	Glu	Ala	Leu	His	Asn	His	Tyr	Thr	Gln	Lys	Ser	Leu	Ser
	450				455					460					
Leu	Ser	Leu	Gly	Lys											
	465														

<210> 165

<211> 462

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetically generated peptide

<400> 165

Met	Gly	Trp	Ser	Cys	Ile	Ile	Leu	Phe	Leu	Val	Ala	Thr	Ala	Thr	Gly
1					5				10			15			
Ala	His	Ser	Glu	Val	Gln	Leu	Leu	Glu	Ser	Gly	Gly	Gly	Leu	Val	Gln
						20			25			30			
Pro	Gly	Gly	Ser	Leu	Arg	Leu	Ser	Cys	Ala	Ala	Ser	Gly	Phe	Thr	Phe
						35			40			45			
Ser	Lys	Tyr	Ser	Met	Glu	Trp	Val	Arg	Gln	Ala	Pro	Gly	Lys	Gly	Leu
					50			55			60				
Glu	Trp	Val	Ser	Arg	Ile	Tyr	Pro	Ser	Gly	Gly	Pro	Thr	Leu	Tyr	Ala
					65			70			75			80	
Asp	Ser	Val	Lys	Gly	Arg	Phe	Thr	Ile	Ser	Arg	Asp	Asn	Ser	Lys	Asn
					85				90			95			
Thr	Leu	Tyr	Leu	Gln	Met	Asn	Ser	Leu	Arg	Ala	Glu	Asp	Thr	Ala	Val
					100				105			110			
Tyr	Tyr	Cys	Ala	Arg	Asp	Ser	Tyr	Gly	Met	Asp	Val	Trp	Gly	Gln	Gly
					115			120			125				
Thr	Thr	Val	Thr	Val	Ser	Ser	Ala	Ser	Thr	Lys	Gly	Pro	Ser	Val	Phe
					130			135			140				
Pro	Leu	Ala	Pro	Cys	Ser	Arg	Ser	Thr	Ser	Glu	Ser	Thr	Ala	Ala	Leu
					145			150			155			160	
Gly	Cys	Leu	Val	Lys	Asp	Tyr	Phe	Pro	Glu	Pro	Val	Thr	Val	Ser	Trp
					165				170			175			
Asn	Ser	Gly	Ala	Leu	Thr	Ser	Gly	Val	His	Thr	Phe	Pro	Ala	Val	Leu
					180			185			190				
Gln	Ser	Ser	Gly	Leu	Tyr	Ser	Leu	Ser	Ser	Val	Val	Thr	Val	Pro	Ser
					195			200			205				
Ser	Ser	Leu	Gly	Thr	Lys	Thr	Tyr	Thr	Cys	Asn	Val	Asp	His	Lys	Pro
					210			215			220				
Ser	Asn	Thr	Lys	Val	Asp	Lys	Arg	Val	Glu	Ser	Lys	Tyr	Gly	Pro	Pro
					225			230			235			240	
Cys	Pro	Ser	Cys	Pro	Ala	Pro	Glu	Phe	Leu	Gly	Gly	Pro	Ser	Val	Phe
						245			250			255			
Leu	Phe	Pro	Pro	Lys	Pro	Lys	Asp	Thr	Leu	Met	Ile	Ser	Arg	Thr	Pro
						260			265			270			
Glu	Val	Thr	Cys	Val	Val	Val	Asp	Val	Ser	Gln	Glu	Asp	Pro	Glu	Val
					275			280			285				
Gln	Phe	Asn	Trp	Tyr	Val	Asp	Gly	Val	Glu	Val	His	Asn	Ala	Lys	Thr
					290			295			300				
Lys	Pro	Arg	Glu	Glu	Gln	Phe	Asn	Ser	Thr	Tyr	Arg	Val	Val	Ser	Val
					305			310			315			320	

Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
325 330 335
Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser
340 345 350
Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
355 360 365
Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
370 375 380
Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly
385 390 395 400
Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
405 410 415
Gly Ser Phe Phe Leu Tyr Ser Arg Leu Thr Val Asp Lys Ser Arg Trp
420 425 430
Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
435 440 445
Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
450 455 460